



CENTER FOR BIOLOGICAL DIVERSITY, *ET AL.*

181 IBLA 325

Decided January 10, 2012



United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy St., Suite 300
Arlington, VA 22203

CENTER FOR BIOLOGICAL DIVERSITY, *ET AL.*

IBLA 2010-86

Decided January 10, 2012

Appeal of a record of decision by the Ely (Nevada) District Office, Bureau of Land Management, approving the construction, operation, and maintenance of a water conveyance system known as the Lincoln County Land Act Groundwater Development and Utility Right-of-Way Project in order to provide water resources to Lincoln County, Nevada. N-79734.

Affirmed.

1. Administrative Procedure: Standing--Appeals: Standing--Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--Rules of Practice: Appeals: Standing to Appeal

In order to show organizational standing, an appellant group must show that the interests it seeks to protect are germane to its organizational purposes, that it has suffered redressible injuries from BLM's decisions, and that one or more of its members has an interest in their own right that is or may be adversely affected by the decision.

2. Administrative Procedure: Hearings--Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--Rules of Practice: Hearings

The Board will not order a hearing under 43 C.F.R. § 4.415 when the record does not present a material issue of fact requiring resolution based upon testimony and evidence in order for the Board to decide the appeal. Where the appeal involves issues concerning whether BLM took a "hard look" under NEPA, the Board will deny a request for a hearing for purposes of resolving matters

of scientific disagreement regarding data and methodology.

3. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements

BLM properly approves construction and operation of a groundwater development and utility right-of-way project that includes a buried water pipeline and ancillary infrastructure, following preparation of an EIS, where, in accordance with section 102(2)(C) of NEPA, 42 U.S.C. § 4332(2)(C) (2006), it has taken a hard look at the potentially significant environmental consequences of doing so. BLM's decision will be affirmed where the appellants do not demonstrate by a preponderance of the evidence that BLM failed to consider a substantial environmental problem of significance to the proposed action, or otherwise failed to abide by the statute.

4. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements

A rule of reason applies when reviewing new information regarding a proposed action analyzed in an EIS and considering whether a supplemental EIS is required. A supplemental EIS is not required when new information based upon changed circumstances does not show that the proposed action will affect the quality of the human environment in a significant manner or to a significant extent not already considered.

5. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements

BLM's alternatives analysis will be upheld where an appellant fails to demonstrate that a reasonable alternative existed and was not considered, in addition to the proposed action and no action alternative, and where the record adequately documents other alternatives that were identified and the reasons for eliminating them from

further consideration. In challenging an EIS for construction and operation of a groundwater development and utility right-of-way project on the basis that the alternatives analysis should have included a project that would transport less water, appellants must point to likely impacts not already considered in connection with the alternatives analyzed in the EIS because they will accomplish the intended purpose of the proposed action, are technically and economically feasible, and will avoid or minimize adverse effects.

6. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements

An EIS does not violate NEPA for failure to adequately consider impacts and failure to treat as connected actions a groundwater development project and a natural gas and water fueled power plant that will share a portion of an underground water pipeline and related infrastructure, where the potential environmental impacts of the respective projects have been studied in separate EISs and the actions are independent, *i.e.*, where either action will proceed whether the other action proceeds or not.

7. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements

When making a determination as to whether a proposed action will have a significant effect on the human environment, the cumulative effects of the proposed action and other actions not connected with the proposed activity must be taken into consideration. A cumulative impact is one which results from the incremental impact of the action when added to other past, present, and reasonably future actions and can result from individually minor but collectively significant actions taking place over time.

8. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969: Environmental
Statements

In considering the adequacy of an EIS, the Board will examine the mitigation measures proposed for ameliorating the environmental consequences of the proposed action. The EIS must contain a reasonably thorough discussion that explains the effectiveness of the specific mitigation measures.

APPEARANCES: Sarah Uhlemann, Esq., Seattle, Washington, and Lisa T. Belenky, Esq., San Francisco, California, for the Center for Biological Diversity and other Appellants; Luke Miller, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Sacramento, California, for the Bureau of Land Management; John T. Lemaster, Esq., Jenny J. Winkler, Esq., and Sean T. Hood, Esq., Phoenix, Arizona, and James R. Cavilla, Esq., and Karen Peterson, Esq., Carson City, Nevada, for Vidler Water Co., Inc. (Intervenor); Dylan V. Frehner, Esq., Pioche, Nevada, for Lincoln County Water District (Intervenor).

OPINION BY ADMINISTRATIVE JUDGE ROBERTS

The Center for Biological Diversity (CBD), the National Parks Conservation Association (NPCA), Post Carbon Salt Lake, the Sierra Club–Toiyabe Chapter (Sierra Club), and Utah Physicians for a Healthy Environment (UPHE) (collectively, Appellants) have jointly appealed a January 8, 2010, decision by the Ely (Nevada) District Manager, Bureau of Land Management (BLM), approving the Record of Decision (ROD) for the Lincoln County Land Act Groundwater Development and Utility Right-of-Way Project (LCLA Project or the Project).¹ See 75 Fed. Reg. 1408

¹ At the request of counsel, Bristlecone Alliance and Citizens for Dixie's Future were dismissed as parties to this action. See Order, IBLA 2010-86 (May 12, 2010). By order dated Mar. 18, 2010, the Board granted motions to intervene by the Lincoln County Water District (LCWD) and the Vidler Water Company, Inc. (VWC), co-applicants for the ROW permit. They have filed an Answer to Appellants' Statement of Reasons (SOR) in which they argue that the appeal should be dismissed for lack of standing (Intervenors' Answer). BLM has responded to the SOR and moved to dismiss the appeal for lack of standing (BLM's Response). Appellants submitted a response to the motions (Appellants' Response), to which both BLM and the Intervenors filed replies (BLM's Reply, Intervenors' Reply). By order dated Oct. 29, 2010, the Board granted Appellants' request to file a reply brief and allowed filing a further response, which they have done (Appellants' Consolidated Brief). The Board's order allowed BLM and the Intervenors to submit responses to Appellants' pleadings, and to address issues related to placement of water wells and groundwater connectedness, and they have done so (BLM's Response to Order, Intervenors'

(continued...)

(Jan. 11, 2010). Briefly stated, the decision approves issuance of a right-of-way (ROW) permit to LCWD for the construction, operation, and maintenance of 73 miles of a buried water pipeline, a fiber optic line to be placed in the same trench, and 73 miles of electrical transmission and distribution lines. ROD at unpaginated (unp.) 3. The pipeline would be used to convey up to 23,820 acre-feet of groundwater per year (AFY) to the LCLA Development Area just north of Mesquite, Nevada, to be pumped from wells in the Tule Desert and Clover Valley Hydrographic Basins. ROD at unp. 1. The ROW grant is to be issued under the Lincoln County Land Act of 2000 (LCLA), Pub. L. No. 106-298, 114 Stat. 1046 (2000), the Lincoln County Conservation, Recreation, and Development Act of 2004 (LCCRDA), Pub. L. No. 108-424, 118 Stat. 2403 (2004), and Title V of the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1761-1771 (2006).

BLM's decision was based upon a final environmental impact statement (FEIS) dated May 2009 prepared pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332(2)(C) (2006). The LCCRDA specified that, before granting an ROW for the LCLA Project, the Department was to comply with NEPA "including the identification and consideration of potential impacts to fish and wildlife resources and habitat." Pub. L. No. 108-424, § 301(b)(3), 118 Stat. at 2413; *see* FEIS at 1-3. Appellants argue on numerous bases that the FEIS prepared by BLM prior to issuance of the ROD fails to meet the requirements of NEPA.²

I. BACKGROUND

A. Events Preceding the ROW Application

In 1998, Lincoln County (LC) and VWC (LC/VWC) filed application Nos. 64692 and 64693 (subsequently modified by application No. 66932) with

¹ (...continued)

Response to Order). In addition, the order directed the parties to supplement the Administrative Record (AR) as necessary regarding well placement within the Project area.

² The AR consists of eight notebooks of documents to which BLM has assigned unique identifying numbers and a copy of the FEIS labeled as volume eight. Except for the ROD and FEIS, documents will be cited by their BLM-assigned numbers. In compiling the AR, BLM became aware of information concerning the location of an archeological site, a matter usually not subject to disclosure; BLM accordingly prepared modified documents for release to the parties. *See* 16 U.S.C. § 470hh(a) (2006); 43 C.F.R. § 7.18. On Nov. 9, 2010, BLM filed a request that the Board limit disclosure of the information. BLM's request is granted.

the Nevada State Engineer (NSE) seeking to extract approximately 14,480 AFY from the Tule Desert Hydrographic Basin, with half that volume to be used to supply the Toquop Energy Project (TEP), and the remainder to be used for municipal purposes in Lincoln County. FEIS at 1-6; *see* FEIS App. A1 at 1-2, 8-9 (NSE Ruling No. 5181).³ The TEP was to be a 1,100-megawatt (MW) natural gas-fired and water-cooled facility at a site approximately 50 miles south-southeast of Caliente, 12 miles north-northwest of Mesquite, and 70 miles northeast of Las Vegas, on land crossed by existing natural gas and electric power transmission lines.⁴ The proposal included drilling 15 wells in the Tule Desert Hydrographic Basin, with the anticipated production of approximately 7,000 AFY to be conveyed to the power plant by a 24-inch-diameter, 12.5-mile pipeline. TEP 2003 FEIS at ES-7, 2-14, 2-24 to 2-26, 4-1.

The National Park Service (NPS) protested LC/VWC's applications, asserting that the proposed groundwater withdrawals risked adversely impacting springs in the Lake Mead National Recreation Area and depleting flows of the Virgin River within it. FEIS App. A2 at 1-2 (Stipulations for Dismissal of Protest). The protests were resolved in 2002 by stipulations under which the NPS withdrew its protests and LC/VWC adopted a plan for the monitoring, management, and mitigation of impacts resulting from extracting groundwater in the Tule Desert. FEIS App. A2.

The NSE addressed LC/VWC's applications in Ruling No. 5181, dated November 26, 2002. FEIS App. A-1. The NSE stated that "additional study is needed before [it could] make a final determination on the entire quantity applied for under these applications," due to the fact that the applicants were "requesting a quantity of water far in excess of the established perennial yield and due to the uncertainties of

³ The applications are not part of the record before the Board. Although the FEIS credits them to LCWD, NSE Ruling No. 5181 appears to correctly state that they were filed by LC on its own behalf. FEIS App. 1 at 1. The LCWD was not created as a political subdivision of the State of Nevada for the purpose of providing water in Lincoln County until 2003. 2003 Nev. Stat. Ch. 474; *see* FEIS at 1-4.

⁴ A Notice of Intent (NOI) to prepare an EIS on the TEP was published in the *Federal Register* on July 22, 2001. An NOI to amend the Caliente Management Framework Plan and prepare an EIS for the *Toquop Land Disposal Amendment to the Caliente Management Framework Plan/Toquop Energy Project* was published in the *Federal Register* on Nov. 7, 2001. In March 2003, BLM issued a *Proposed Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Final Environmental Impact Statement for the Toquop Energy Project* (TEP 2003 FEIS). The description of the power plant is from FEIS at 1-2 and 2-10 and Executive Summary (ES) at 1.

the carbonate-rock aquifer system.”⁵ *Id.* at 11. In particular, the NSE required the studies to include a “recharge analysis that is peer reviewed and accepted by the United States Geological Survey [USGS] in conjunction with the [Nevada] Department of Conservation and Natural Resources, Division of Water Resources, and studies of the impacts of pumping the amount granted in this ruling.” *Id.*

While LC/VWC’s applications were pending before the NSE, Congress enacted the LCLA which authorized the sale by competitive bidding of 13,500 acres of public lands in Lincoln County to allow the City of Mesquite, located in Clark County about two miles south of the Lincoln County line, to expand to the north. Pub. L. No. 106-298, §§ 2(a)(3), 4(a)(1), 114 Stat. 1046, 1047 (2000); *see* 43 C.F.R. § 2711.3-1. The sale of three parcels totaling 6,478 acres was challenged in the U.S. District Court for the District of Nevada, which concluded that an EIS was required to assess whether impacts on the desert tortoise would be significant, to develop a monitoring plan and mitigation measures for that species, to more fully address reasonably foreseeable cumulative impacts of the sale, and to consider a wider range of alternatives. *Western Land Exchange Project v. BLM*, 315 F. Supp. 2d 1068, 1072, 1092, 1094, 1096-97 (D. Nev. 2004).⁶ As of the date of the District Court’s decision, BLM had yet to transfer at least 10,540 acres of additional land to the City of Mesquite as authorized by the Mesquite Lands Act of 1986, Pub. L. No. 99-548, 100 Stat. 3061 (1986). *Id.* at 1095. The court noted that the various actions contemplated by BLM would, “[t]aken together, . . . open

⁵ The NSE defines perennial yield as the “amount of usable water from an aquifer that can be economically withdrawn and consumed each year for an indefinite period of time. Perennial yield cannot exceed the natural recharge to that aquifer and ultimately is limited to the maximum amount of discharge that can be utilized for beneficial use.” AR 3.1.5 at 1 (citing <http://water.nv.gov/WaterPlanning/wat-fact/define.cfm> as accessed July 28, 2008); *see* FEIS at 3-41.

⁶ The court enjoined sale and patenting of the lands at issue prior to completion of the EIS. *Western Land Exchange Project*, 315 F. Supp. 2d at 1099. Appeals to this Board, docketed as IBLA 2002-7 and IBLA 2002-29, were consolidated and later dismissed when BLM established that the parcels at issue had been patented on Nov. 19, 2003, and Aug. 8, 2005. Order, *Western Land Exchange Project*, IBLA 2002-7 (Oct. 16, 2007). The FEIS refers to an auction of unspecified acreage held on Feb. 5, 2005, and states that the lands in the LCLA Area “are currently undeveloped but are being planned by Lincoln County as a Planned Unit Development.” FEIS at 1-4; *see* FEIS at 4-66.

36,747 acres for development and support a population in excess of 200,000 residents.”⁷ *Id.*

Also during this period, Toquop Energy, Inc. (TEI), filed its ROW application with BLM for the TEP, and BLM issued the TEP 2003 FEIS in March 2003. On November 3, 2003, BLM issued an ROW permit (N-77484, N-77484-01, N-77484-02, N-77484-03), based upon a ROD issued previously in April 2003, authorizing the construction, maintenance, and operation of a 1,100 MW natural gas-fired, water-cooled power generating plant on 80 acres; the permanent use of an additional 20 acres for a 1,300 linear foot overhead electric transmission line to the plant from the Navajo-McCullough Electric Transmission Line; a 2,400-foot-long 20-inch natural gas pipeline to the plant from the Kern River Gas Pipeline; and construction of an access road to the plant. Intervenor’s Response, Ex. B; TEP 2003 FEIS at ES-6, ES-7, 2-15 to 2-16. An additional permit (N-77486, N-77486-01) granted a 30-foot wide ROW (45 acres) for the construction of a buried 12.5-mile, 24-inch water pipeline running from the Tule Desert Hydrographic Basin to the TEP power plant and an adjacent underground electric power line from the power plant to supply well pumps in the Tule Desert. Intervenor’s Response, Ex. B; TEP 2003 FEIS at ES-8, 2-14, 2-25. The proposal included drilling up to 15 wells in the Tule Desert Basin area to supply approximately 7,000 AFY to the power plant. *See* TEP 2003 FEIS at ES-7, 2-14, 2-24.

In addition to addressing the sale of Federal lands in Lincoln County, the LCCRDA, enacted in 2004, mandated that, notwithstanding requirements of 43 U.S.C. §§ 1711 and 1763, “the Secretary . . . shall establish on public land a 2,640-foot wide utility corridor for utilities in Lincoln and Clark County, Nevada, as generally depicted on a map entitled ‘Lincoln County Conservation, Recreation, and Development Act’, and dated October 1, 2004.” Pub. L. No. 108-424, § 301(a)(1), 118 Stat. at 2413. Subject to valid existing rights, the legislation required the Secretary to grant to the Southern Nevada Water Authority (SNWA) and the LCWD “nonexclusive rights-of-way to Federal land in Lincoln and Clark County, Nevada for any roads, wells, well fields, pipes, pipelines, pump stations, storage facilities, or other facilities and systems that are necessary for the construction and operation of a water conveyance system, as depicted on the map.” *Id.* § 301(b)(1). The LCCRDA specified that the Department must comply with NEPA before issuing any ROWs, and required the Secretary, acting through the USGS and other agencies, to “conduct a

⁷ The FEIS provides varying reports as to population growth. It states that indirect socioeconomic impacts would include the addition of 24,000 dwelling units and an increase of 60,000 residents, a 14-fold increase over Lincoln County’s 2005 population. FEIS at 4-49. However, elsewhere it puts the number of new dwellings in the LCLA Area at 44,000 and projects the population of Lincoln County to increase from 4,165 in 2000 to over 345,000 by 2040. FEIS at 4-66, 4-77; *see also* FEIS at 3-80 (estimated population of 4,391 in 2005).

study to investigate ground water quantity, quality, and flow characteristics in the deep carbonate alluvial aquifers of White Pine County, Nevada, and any groundwater basins that are located in White Pine County, Nevada, or Lincoln County, Nevada, and adjacent areas in Utah.” *Id.* § 301(e)(1).

B. The ROW Application and Related History

LCWD and VWC filed their ROW application with BLM on February 9, 2005 (N-79734). AR 1.1.1. The application contemplated two projects. One, the Kane Springs Valley Groundwater Development Project (Kane Springs Project), was to consist of seven water production wells and up to 13.8 miles of a water transmission pipeline in a 20-foot wide easement with accompanying electric and communication lines. The other, the LCLA Project, was to have eight 16-inch diameter water production wells in the South Tule Desert Basin in an area previously permitted for the TEP power plant, and a 24-inch water transmission pipeline in a 30-foot wide easement that would extend 12.9 miles parallel to the approved pipeline for the TEP and then extend eastward an additional 7.3 miles to the LCLA Area. The ROW corridor would also be used for power transmission lines and communication lines. Subsequently, the two projects were made the subject of separate applications. *See* AR 1.5.5, 3.2.1.1 through 3.2.1.5.

In March 2006, BLM published in the *Federal Register* separate notices of intent to prepare separate EISs for the Kane Springs Project and the LCLA Project. 71 Fed. Reg. 16340 (Mar. 31, 2006). The eight groundwater production wells were described as located in both the Tule Desert Hydrographic Basin and further north in the Clover Valley Hydrographic Basin. *Id.* at 16341. The notice, however, also stated that the “proposed production wells would be located in the well field area authorized for the [TEP], which is a 1100 MW gas-fired powerplant[,]” and the “water pipeline would follow the same alignment as the approved water pipeline for the power plant” and then “proceed to the LCLA development area.” *Id.* CBD submitted comments on behalf of itself and other organizations, including the Sierra Club, which submitted additional separate comments. AR 5.4.2, SC32B and SC35B; AR 5.4.3, SC16L, SC17L, and SC19L.

A year later, in March 2007, LCWD submitted an expanded Plan of Development (POD) for the LCLA Project. AR 1.3.1. It specified that 15 wells would be drilled in the Tule Desert to produce 9,340 AFY and an additional 15 wells would be drilled in Clover Valley with an anticipated production of 14,480 AFY. AR 1.3.1 at 1-2, 26.⁸ The wells in the Tule Desert would be drilled to depths of 2,000 to

⁸ The FEIS refers to an additional six applications the LCWD filed with the NSE in March 2007, but does not identify whether they are for wells in the Tule Desert or
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2,500 feet below the surface and are described as drawing water from a regional carbonate rock aquifer, while wells in Clover Valley would apparently be drilled to shallower depths of 1,200 to 1,500 feet below the surface. AR 1.3.1 at 26, AR 1.4.1 at 4-8. In addition, the POD specified that the pipelines would consist of two collection pipelines in Clover Valley totaling approximately 24 miles, a main transmission pipeline of approximately 47 miles, and approximately 30 miles of lateral pipelines to the wells; each pipeline would have a 60-foot wide permanent easement and a 100-foot wide temporary construction easement. AR 1.3.1 at 8, 11. Both BLM and the Environmental Protection Agency (EPA) published notices of the availability of a Draft EIS (DEIS) for the LCLA Project in the *Federal Register* on May 23, 2008. 73 Fed. Reg. 30099, 30148; see AR 6.1 (DEIS).

On June 24, 2008, Peter Mock Groundwater Consulting, Inc., completed a report entitled *Projection of Groundwater Impacts in Response to Proposed Pumping from Beneath the Tule Desert in Southeastern Nevada Using MODFLOW-2000* (the Mock Report), examining the projected impacts of pumping 9,340 AFY from 6 wells in the Tule Desert. The Mock Report found that “[t]he Paleozoic carbonate system beneath the Tule Desert appears to be adequate to produce this amount of groundwater and the impacts do not appear to reach surface water discharge points of interest in the model area in significant magnitudes.” AR 1.4.4 at 21-22 (Version 3). The report was one of five documents reviewed by the USGS in Open-File Report 2008-1354 as called for by NSE Ruling No. 5181. AR 3.1.5 at 1, 3, 17. The USGS criticized the Mock Report because “little attempt was made to calibrate the model” in order to be “more accurate as a predictive tool and useful in terms of understanding the conceptualization of the ground-water flow system in the Tule Desert” by, among other matters, modifying “input data so the model more closely matches measured ground-water levels and flows.” AR 3.1.5 at 14 (citation omitted).

The USGS also reviewed a report dated January 8, 2008, by Daniel B. Stephens & Associates, Inc., entitled *Mean Annual Recharge for the Tule Desert Hydrographic Basin Lincoln County, Nevada* (DBS Report). AR 3.4.3.1. The DBS Report reviewed prior studies and evaluated various methods for estimating groundwater recharge rates and

determined that groundwater recharge originating from within the Tule Desert basin ranges from roughly 3,500 to 10,000 acre-feet per year (ac-ft/yr) by a variety of techniques and with a range of different precipitation rates (Table ES-1). Most of the analyses fall in the range

⁸ (...continued)

the Clover Valley. It is unclear whether the applications include the 30 wells addressed by the FEIS. FEIS at 3-41.

of about 4,000 to 8,000 ac-ft/yr, centering on about 6,000 ac-ft/yr. Additional data collection may increase the estimated recharge. The recharge rates calculated in this investigation are greater than the value previously predicted in the reconnaissance investigation, 2,100 ac-ft/yr.

3.4.3.1 at ES-1 (citation omitted).

On April 29, 2009, the NSE issued Ruling No. 5986. In that Ruling, the NSE stated that the recharge data presented in the DBS Report “are rigorous investigations into the mechanisms involved in ground-water recharge, and represent a significant advancement in the understanding of precipitation and recharge in the Tule Desert”; however, the NSE found that DBS’ investigations were “of a regional nature and do not adequately meet the goal” of NSE Ruling No. 5181 to “provide additional studies to demonstrate additional recharge in the Tule Desert.” Ruling No. 5986 at 14. The NSE concluded that “Applicant’s reported recharge estimates of 3,900 to 8,000 afa [acre-feet annually], with an average of 5,400 afa are higher than the provided data supports,” and determined “that ground-water recharge in the Tule Desert Hydrographic Basin, as supported by the available data, is likely in the range of 2,500 to 5,000 afa.” *Id.* at 15. The NSE also noted that the USGS had criticized the impacts analysis of the Mock Report because it was not calibrated due to a lack of data, but, nevertheless, found that the model employed in the Mock Report “provides a reasonable, first order estimate of drawdown due to pumping in the Tule Desert.” *Id.* at 16. The NSE concluded that by limiting pumping to the perennial yield, as shown in the Mock Report model, there would “not be unreasonable impacts to existing water rights in adjacent basins, including the Virgin River Valley.” *Id.* The Ruling then stated that “the perennial yield of the Tule Desert Hydrographic Basin is 2,500 acre-feet, which is equal to one-half of the upper range of the basin recharge of 5,000 afa.” *Id.* The NSE found that there were 396 AFY of unappropriated water in the Tule Desert Hydrographic Basin and awarded that amount to LCWD and VWC. *Id.* at 16, 20.

LCWD and VWC appealed Ruling No. 5986 in the Nevada courts and also filed an action against the NSE in Federal court. The parties resolved the litigation by a Settlement Agreement dated April 15, 2010. Intervenor’s Response, Ex. A. It provides that:

The State Engineer shall grant Application 64692 in the amount of 7,240 acre feet annually. The total combined duty of Permits 64692 and 66932 shall not exceed 9,340 acre-feet annually. However, the State Engineer finds, in order to gather the necessary information to more accurately determine the additional water available to appropriate under N.R.S. § 533.370, development of water will occur in stages in

conjunction with the updated June 2005 Monitoring Plan approved by the State Engineer.

Id. at 3; see FEIS App. A3 (June 2005 Monitoring Plan). Accordingly, the Settlement Agreement provided that “[t]he initial use of water under Permit 64692 is limited to 2,900 acre-feet annually (a total of 5,000 acre-feet annually including permit 66932).” Intervenor’s Response, Ex. A at 3. Prior to obtaining additional water, LCWD and VWC are to “calibrate to actual field conditions the Tule Desert Goundwater Flow Model” provided in the Mock Report and collect additional hydrologic data throughout the Tule Desert, to be submitted at least annually to the NSE. The parties are to meet annually to review the data and LCWD and VWC “*may at any time seek the use of additional water up to the full amount under Permit 64692 to the extent that the additional studies and evidence demonstrate to the satisfaction of the State Engineer that additional water is available for appropriation under N.R.S. § 533.370.*” *Id.* at 3-4 (emphasis added). In the meantime, LCWD and VWC are to implement a staged pumping program over 8 years, pumping at least an average of 2,500 acre-feet annually and a minimum of 2,000 acre-feet. *Id.* at 4.

C. The ROD and the Scope of the Appeal

BLM issued the ROD on January 8, 2010, and published its notice of availability of the ROD in the *Federal Register* on January 11, 2010. 75 Fed. Reg. 1408. The ROD states that the LCLA ROW grant will consist of three components: (1) approximately 73 miles of a main water transmission pipeline and lateral pipelines in the Clover Valley within a 100-foot temporary construction ROW and a 60-foot wide permanent ROW; (2) up to 73 miles of electrical transmission and distribution lines within a permanent 100-foot ROW; and (3) a fiber optic line to be placed within the same trench as the pipeline with its own 10-foot permanent ROW. ROD at unp. 3. In addition, the ROD states that a separate ROW will be issued for a 15-mile natural gas pipeline running from the Kern River Natural Gas Pipeline following the water pipeline ROW to the LCLA Area. *Id.*

The ROD notes that BLM had previously issued to LCWD a series of ROW grants for 9 exploration well sites in Clover Valley and 18 monitoring and test well sites in Tule Desert, along with 1 production well site. ROD at unp. 2. The FEIS reviews the environmental impacts of drilling up to 15 production wells within the “bounded well field area” in the Clover Valley and an additional 15 production wells in the “bounded well field area” of the Tule Desert. See FEIS Map 2-1 (dotted red lines). Thus, BLM defined the general well fields where any future production wells would be located. *Id.* In response to the Board’s October 29, 2010, order requesting additional briefing with regard to well location, BLM explained that the Board has previously allowed BLM to undertake an analysis of environmental impacts without identifying specific drilling sites and to later perform a site-specific evaluation of

surface impacts when drill sites are identified. BLM's Response to Order at 8 (citing *Biodiversity Conservation Alliance*, 174 IBLA 1, 16-17 (2008) (involving oil and gas wells)).⁹ Further, the FEIS included "in its impact analysis the total potential volume of water that the project proponent is seeking through the NSE." BLM's Response to Order at 8; *see* Intervenor's Response to Order at 7 (groundwater pumping, wellsites, and pipeline were component parts of the same project).

II. PROCEDURAL ISSUES

Prior to turning to the merits of Appellants' various arguments concerning the adequacy of BLM's NEPA analysis, we will resolve two procedural matters. First, BLM and the Intervenor's have argued that the appeal should be dismissed for lack of standing. Second, Appellants note that the Board's October 29, 2010, order describes the issue of hydrological connectivity as "highly technical" and they request that, if the Board does not decide to set aside BLM's decision and remand the case, it schedule an evidentiary hearing on factual issues. Appellants' Consolidated Brief at 8 n.7, 26. BLM and the Intervenor's object to a hearing. BLM's Response to Order at 3; Intervenor's Response to Order at 13-17.

⁹ In its Oct. 29, 2010, order, the Board noted that approval to drill the 30 wells and to produce a specified quantity of water is the exclusive responsibility of the NSE, but that BLM must consent to their placement on Federal land. The Board was concerned about "whether . . . these matters will be subject of future decisions based upon further NEPA review and possible appeals." Order, IBLA 2010-86, at 3. In response to the Board's order, BLM explained that, for the purpose of NEPA analysis of potential impacts, it identified a "bounded well field area" and analyzed "the environmental impacts of disturbing the total acres associated with the project" in the two hydrographic basins "while waiting to grant rights-of-way to particular sites within the bounded area of analysis" as allowed by NSE rulings. BLM's Response to Order at 5-6; *see* Map 2-1. Consequently, while the "ROD does not grant rights-of-ways to all of the possible 30 production wells, and associated facilities," the FEIS analyzes "the general environmental impacts on the portions of the Clover Valley and Tule Desert hydrographic basins which would include any necessary production wells and associated facilities." BLM's Response to Order at 6; *see also* Intervenor's Response to Order at 4-6. BLM points to the portion of the ROD, which states that various "well field elements" identified in the EIS would be "specifically identified by LCWD in future ROW applications which would then be reviewed and considered in subsequent NEPA analyses," and that these could include well sites for which LCWD already has ROW permits. BLM's Response to Order at 6; ROD at unp. 2; *see* FEIS at ES-2.

A. Appellants, Except UPHE, Have Standing to Appeal

[1] As discussed in *The Coalition of Concerned National Park [Service] Retirees*, 165 IBLA 79, 81-82 (2005), the Board's rules governing standing have been codified at 43 C.F.R. § 4.410(a). The regulation states that, except as otherwise provided, "[a]ny party to a case who is adversely affected by a decision of an officer of the Bureau of Land Management or of an administrative law judge shall have a right to appeal to the Board." To pursue an appeal from a BLM decision, an appellant must be a "party to a case" within the meaning of subsection 4.410(b) and be "adversely affected" by the decision within the meaning of subsection 4.410(d). See *Theodore Roosevelt Conservation Partnership*, 178 IBLA 201, 206-07 (2009), and cases cited. If either of the two requirements is not met, an appeal must be dismissed for lack of standing. See, e.g., *id.*; *Western Aggregates, LLC*, 174 IBLA 280, 288-89 (2008); *Colorado Environmental Coalition*, 173 IBLA 362, 367-70 (2008) (citing *Southern Utah Wilderness Alliance*, 140 IBLA 341, 346 (1997)).

A party to a case "is one who has taken action that is the subject of the decision on appeal, is the object of that decision, or has otherwise participated in the process leading to the decision under appeal." 43 C.F.R. § 4.410(b). "A party to a case is adversely affected . . . when that party has a legally cognizable interest, and the decision on appeal has caused or is substantially likely to cause injury to that interest." 43 C.F.R. § 4.410(d). "The interest need not be an economic or a property interest; use of the land involved or ownership of adjoining land suffices, but mere interest in a problem or concern with the issues involved does not." *Kendall's Concerned Area Residents*, 129 IBLA 130, 136-37 (1994). A party may also establish that it is adversely affected by setting forth interests in resources or in other land or its resources, including adjacent land, "and showing how the decision has caused or is substantially likely to cause injury to those interests." *Board of Comm'rs of Pitkin County*, 173 IBLA 173, 178 (2007); *The Coalition of Concerned National Park [Service] Retirees*, 165 IBLA at 84, and cases cited. Such interests may include the cultural, recreational, and aesthetic use and enjoyment of the affected public lands. *Colorado Environmental Coalition*, 173 IBLA at 367; *Board of Comm'rs of Pitkin County*, 173 IBLA at 178; *The Coalition of Concerned National Park [Service] Retirees*, 165 IBLA at 80.

When an organization appeals a BLM decision, it must demonstrate that one or more of its members has a legally cognizable interest in the subject matter of the appeal, coinciding with the organization's purposes, that is or may be adversely affected by the decision. *Concerned Citizens for Nuclear Safety*, 175 IBLA 142, 146 (2008); *The Coalition of Concerned National Park [Service] Retirees*, 165 IBLA at 86-87; *Legal and Safety Employer Research, Inc.*, 154 IBLA 167, 172-73 (2001); *Laser, Inc.*, 136 IBLA 271, 273-74 (1996). The Board has long held that it is the responsibility of an appellant to demonstrate the requisite elements of standing.

See *Board of Comm'rs of Pitkin County*, 173 IBLA at 178 (citing *Colorado Open Space Council*, 109 IBLA 274, 280 (1989); *Mark S. Altman*, 93 IBLA 265, 266 (1986)).

BLM and the Intervenor do not claim that any of the five Appellants fails to qualify as a party to the case. A review of the record establishes that each is a party because it participated in the decisionmaking process by submitting comments in response to the published scoping notice or to the DEIS. See AR 5.4.2 SC32B, AR 5.4.3 SC 17L, AR 7.6.8, AR 7.6.13, AR 9.4.1, AR 9.4.2. Instead, BLM and the Intervenor contend that the declarations submitted by members of the appellant organizations to show standing do not establish that each group qualifies as “adversely affected” by the decision on appeal. BLM’s Response at 2-4; BLM’s Reply at 5-7; Intervenor’s Answer at 5-7. In particular, the Intervenor contend, based on *Summers v. Earth Island Institute*, 555 U.S. 488, 494 (2009), that the declarations are insufficient because they “fail to describe specific, concrete plans to visit specific areas that will be directly impacted by the Project in the future.” Intervenor’s Answer at 6; see Intervenor’s Reply at 5, 9-10.

Intervenor’s reliance on *Summers v. Earth Island Institute* is somewhat exaggerated. In responding to other arguments based upon U.S. Supreme Court decisions about standing, the Board has pointed out that it is not an Article III court, and has discussed the difference between judicial standing and administrative standing. See *The Coalition of Concerned National Park [Service] Retirees*, 165 IBLA at 86-87; *Marathon Oil Co.*, 139 IBLA 347, 354-56 (1997), and cases cited; *Laser, Inc.*, 136 IBLA at 273, and cases cited; cf. *Headwaters, Inc.*, 116 IBLA 129, 132 (1990) (the Board does not conduct “judicial review” under Article III). The Board, however, has recognized that judicial decisions can “provide a useful guide as to the types of interests which have been deemed relevant and the concerns which are properly considered in adjudicating administrative appeals.” *In re Pacific Coast Molybdenum*, 68 IBLA 325, 332 (1982).

In regard to the Intervenor’s specific reason for citing *Summers v. Earth Island Institute*, the Board has never required a party to establish that it is adversely affected by identifying a specific plan to visit a particular site at a definite future date. To the contrary, we have uniformly required parties to establish that they have used the land or area affected by a decision prior to issuance of the decision being appealed. See *The Center for Tribal Water Advocacy v. BLM*, 173 IBLA 165, 171 (2007) (citing *Center for Native Ecosystems*, 163 IBLA 86, 90 (2004)). An intent or plan to visit an area in the future may be relevant, but is neither required nor controlling. See *Theodore Roosevelt Conservation Partnership*, 178 IBLA at 204, 208 (appeal dismissed because appellant had not established that any member “has used or in the future will use any of the protested parcels”). The Intervenor misread *Summers v. Earth Island Institute* to require that a declaration supporting standing must specify a date when the affected land will be visited after construction of the Project appealed

has begun, even though the Project's proponent has not identified such a date. See Intervenor's Reply at 6, 8. Neither judicial nor administrative standards for standing require such an assertion.

BLM's initial challenge to Appellants' standing correctly pointed out that supporting declarations had been submitted on behalf of only CBD and Post Carbon Salt Lake. BLM's Response at 3; see Intervenor's Answer at 5-6. When responding to the motions to dismiss, Appellants provided additional declarations to support standing by the Sierra Club, NPCA, and UPHE.¹⁰ See Appellants' Response at 3-4, 26, 36; BLM's Reply at 5, 7. In reviewing the declarations, we are guided by the standard expressed in *Santa Fe Northwest Information Council, Inc.*, 174 IBLA 93, 103 (2008): "There must be colorable allegations of adverse effect and . . . a causal relationship between the action undertaken and the injury alleged," and "[t]he appellant need not prove that an adverse effect will, in fact, occur as a result of the BLM action." *Accord Fred E. Payne*, 159 IBLA 69, 73 (2003); *Missouri Coalition for the Environment*, 124 IBLA 211, 216 (1992); *California State Lands Commission*, 58 IBLA 213, 217 (1981).

Upon review of the declarations, the Board finds that CBD, Post Carbon Salt Lake, the Sierra Club, and NPCA each has standing to appeal and the motions to dismiss them as parties are denied. The declaration of Dr. Brian Moench submitted on behalf of UPHE, however, does not withstand scrutiny. He clearly has a personal and professional interest in the subject of air pollution and he believes that withdrawing groundwater in southeastern Nevada will negatively affect native vegetation, result in dust, and affect air quality throughout Utah. See Moench Declaration, ¶¶ 2, 5, 6. However, an intellectual or academic interest is not sufficient to support standing. Although Moench has resided in Salt Lake City for 40 years and claims that he has "traveled across Utah and Nevada where the Lincoln Project will be constructed," as well as other areas that will be affected by groundwater pumping, the only instance he offers is that he "traveled by car through Nevada on [his] way to and from college in California." Moench Declaration, ¶¶ 3, 19, 20. His assertion of travel through an unspecified portion of Nevada during unidentified years is too broad and potentially too remote in time to support standing. UPHE lacks standing to appeal and the motion to dismiss it as a party is granted, but the

¹⁰ BLM claims the additional declarations should not be accepted by the Board, and the Intervenor's have filed a motion to strike them as untimely. See BLM's Reply at 7-8; Intervenor's Motion to Strike and Intervenor's Reply at 5 ("untimely declarations"). The motion is denied. Contrary to the arguments presented, neither the Board's regulations nor its prior decisions limit a party to providing supporting documents with its notice of appeal or SOR. See Intervenor's Motion to Strike at 3.

organization will remain as an amicus. *See Kendall's Concerned Area Residents*, 129 IBLA at 136-37.

B. The Request for a Hearing is Denied

[2] The regulation at 43 C.F.R. § 4.415 (2009), which was in effect when Appellants filed their notice of appeal and SOR, provided that a party could request, within 30 days of when an answer is due, that an appeal be referred to an administrative law judge (ALJ) for the purpose of conducting a hearing on an issue of fact and that the Board had discretion to “on its own motion refer any case to an administrative law judge for a hearing on an issue of fact.” *See* 75 Fed. Reg. 64655, 64667 (Oct. 20, 2010) (revised regulation).¹¹ Thus, a hearing, if one were appropriate, would be conducted by an ALJ, not the Board.

Appellants are asking the Board to refer this matter for a hearing for purposes of resolving issues that are the subject of scientific dispute. What they overlook is the principle that our objective is not to decide whether an EIS or environmental assessment is based upon the best scientific data and methodology available or to resolve disagreements in the scientific community as to those issues. *See Wyoming Audubon*, 151 IBLA 42, 51 (2000) (citing *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1333 (9th Cir. 1992), and *Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976, 986 (9th Cir. 1985)). Our concern is whether “BLM’s analysis of the available data was reasonable and provides an adequate basis for its decision.” *Wyoming Audubon*, 151 IBLA at 51. The Intervenor correctly assert that “Appellants’ attempt to turn this appeal into a battle of the experts, raising conflicting scientific opinions, is not a basis to challenge an EIS.” Intervenor’s Response to Order at 14. Further, “[w]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts.” *Id.*; *see Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 378 (1989); *Fred E. Payne*, 159 IBLA at 77. We agree with Intervenor that the EIS “need not achieve scientific unanimity on the desirability of proceeding with the proposed action.” Intervenor’s Response to Order at 14 (quoting *Life of the Land v. Brinegar*, 485 F.2d 460, 472-73 (9th Cir. 1973) (internal citations omitted), and citing *Arizona Past and Future Foundation, Inc. v. Lewis*, 722 F.2d 1423, 1428 (9th Cir. 1983)).

While the subject of hydrological connectivity is a central concern to the parties herein, that concern does not present a material issue of fact requiring resolution based upon testimony and other evidence in order for the Board to decide the appeal. *See Peter J. Mehringer*, 177 IBLA 152, 169 (2009); *General Chemical*

¹¹ Appellants erroneously refer to 43 C.F.R. §§ 4.118 and 4.122, regulations of the Interior Board of Contract Appeals. That Board has been abolished, with its functions transferred to the Civilian Board of Contract Appeals. *See* 75 Fed. Reg. at 64656.

(*Soda Ash*) *Partners*, 176 IBLA 1, 6-7 (2008). The reason is relatively straightforward. As has been frequently said, NEPA does not mandate any particular substantive result, but rather imposes procedural obligations to ensure that an agency is fully informed of the possible environmental consequences when it exercises its substantive decision-making authority. See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989); *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.* (*Vermont Yankee v. NRDC*), 435 U.S. 519, 558 (1978); *Biodiversity Conservation Alliance*, 174 IBLA at 13-14; *Wyoming Audubon*, 151 IBLA at 51. The FEIS for the LCLA Project acknowledges that issues related to groundwater flow and availability, as well as hydrological connectivity of the potentially affected water basins, are the subject of differences of opinion among scientists, hydrologists, and other experts. FEIS at 4-2. Rather than attempt to arrive at a resolution of those issues, we will defer to the reasonable opinions of BLM's own qualified experts. *Marsh v. Oregon Natural Resources Council*, 490 U.S. at 378. Our task is to decide whether BLM took a hard look at the available data, albeit conflicting, and issued a decision that is supported by the record. As discussed below, we conclude that BLM's ROD and FEIS meet that standard.

III. ANALYSIS: BLM'S ENVIRONMENTAL REVIEW COMPLIES WITH NEPA

A. Standard of Review

[3] We will begin our NEPA analysis, as did BLM, by quoting from *Wyoming Outdoor Council*, 176 IBLA 15 (2008), in which the Board set forth the following legal framework for evaluating challenges to NEPA compliance:

NEPA is a procedural statute designed to “insure a fully informed and well-considered decision.” *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 558 (1978). NEPA does not bar actions which affect the environment, even adversely. Rather, the process assures that decisionmakers are fully apprised of likely effects of alternative courses of action so that selection of an action represents a fully informed decision. *In re Bryant Eagle Timber Sale*, 133 IBLA 25, 29 (1995). When BLM has satisfied the procedural requirements of section 102(2)(C) of NEPA, it will be deemed to have complied with NEPA, regardless of whether a different substantive outcome would be reached by appellants, this Board, or a reviewing court. *National Wildlife Federation*, 169 IBLA 146, 155 (2006).

An EIS is judged by whether it constitutes a “detailed statement” that takes a “hard look” at the potentially significant environmental consequences of the proposed Federal action and

reasonable alternatives thereto, considering all relevant matters of environmental concern. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976); *Western Exploration Inc.*, 169 IBLA 388, 399 (2006); *Southwest Center for Biological Diversity*, 154 IBLA 231, 236 (2001); see 40 C.F.R. § 1502.2(a). We are guided by a “rule of reason.” *IMC Chemical, Inc.*, 155 IBLA 173, 195 (2001). The EIS must contain a “reasonably thorough discussion of the significant aspects of the probable environmental consequences” of the proposed action and alternatives. *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982), quoting *Trout Unlimited, Inc. v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974). Significant impacts are expected when an agency prepares an EIS. *Western Exploration Inc.*, 169 IBLA at 399, citing 40 C.F.R. § 1502.16 (EIS must include discussion of “adverse environmental effects which cannot be avoided”); 42 U.S.C. § 4332(2)(C) (2000) (EIS required when significant impacts are found). [Footnote omitted.]

176 IBLA at 25 (quoting *Biodiversity Conservation Alliance*, 174 IBLA at 13-14).

An appellant bears the burden to show, by a preponderance of the evidence, with objective proof, that “BLM failed to adequately consider a substantial question of material significance to the proposed action, or otherwise failed to abide by section 102(2)(C) of NEPA.” *Id.* Further, when issues of a highly technical nature are involved, BLM may rely upon the opinions of its technical experts concerning matters within their expertise, and a challenge to those opinions, which are reasonable and supported by the record, must demonstrate, by a preponderance of the evidence, error in data, methodology, analysis, or conclusions of the experts. *Id.* (citations omitted). Mere differences of opinion, even expert opinions, do not suffice to prove a failure by BLM to comprehend the nature or scope of a significant impact. *Id.* (citing *Fred E. Payne*, 159 IBLA at 78).

B. BLM is Not Required to Prepare a Supplemental EIS (SEIS)

[4] Appellants argue that the change in the TEP from a coal-fired power plant to one which will generate electricity from both a natural-gas-fired plant and solar panels is a significant new circumstance under 40 C.F.R. § 1502.9(c)(1)(ii)¹² requiring BLM to supplement the FEIS because the plant’s water consumption will be reduced by 60-70%. SOR at 8; see FEIS at 1-18. They contend that the change is directly relevant to both the decision to route the pipeline through the TEP site and the size of the pipeline ROW. *Id.* They also point out that, after the FEIS was

¹² The regulation requires an SEIS when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii).

prepared, the NSE issued Ruling No. 5986 granting only an additional 396 AFY, “much less water than applied for and accounted for by BLM in evaluating reasonable alternatives for the Project and the size of the pipeline.” SOR at 8.

As BLM notes in its Response, the Board recently set forth the standard to be applied in determining whether preparation of an SEIS is required under NEPA:

[A]n agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made. On the other hand, . . . NEPA does require that agencies take a “hard look” at the environmental effects of their planned action, even after a proposal has received initial approval Application of the “rule of reason” thus turns on the value of the new information to the still pending decisionmaking process. In this respect the decision whether to prepare a supplemental EIS is similar to the decision whether to prepare an EIS in the first instance: If there remains “major Federal actio[n]” to occur, and if the new information is sufficient to show that the remaining action will “affec[t] the quality of the human environment” in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared.

Southern Utah Wilderness Alliance, 177 IBLA 29, 36 (2009) (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. at 373-74 (footnotes omitted; *quoted in* BLM’s Response at 11)). “[W]hether more NEPA analysis based on new information is required depends on the nature of the NEPA analysis already completed, and the nature of the information available at the time of the agency action.” *Center for Native Ecosystems*, 170 IBLA 331, 346 (2006). The primary question is whether the new information presents “a seriously different picture of the likely environmental consequences of the proposed action not adequately envisioned by the original EIS.” *Forest Guardians*, 170 IBLA 80, 96 (2006) (quoting *Wyoming Outdoor Council*, 159 IBLA 388, 410 (2003)). In this case it does not.

As discussed above, TEI originally proposed to construct a 1,100 MW natural gas-fired and water-cooled power plant and convey an anticipated 7,000 AFY of groundwater to it from 15 wells in the Tule Desert using a 24-inch-diameter, 12.5-mile pipeline. BLM prepared an EIS and in 2003 issued an ROD approving the TEP. FEIS at 4-64. Sometime prior to issuance of the FEIS at issue in this appeal in May of 2009, the proposal was changed to the construction of a 750 MW coal-fired power plant that would use 2,500 AFY. FEIS at 4-64 to 4-65. The Intervenor explain that the reduction in the amount of water needed for the plant was due to the fact that the coal-fired plant would be dry-cooled rather than wet-cooled.

Intervenors' Answer at 18; *see id.*, Ex. D at 2-12 to 2-13, 2-16 (Chapter 2.0 of DEIS).¹³ Because the FEIS for the LCLA Project reviewed the environmental impacts of producing and transporting up to 23,820 AFY, the reduction resulting from the change to a dry-cooled plant does not indicate that there would be a significant change in water consumption that would have fundamentally different environmental consequences from those of the Proposed Action reviewed in the FEIS.

The Intervenors explain clearly why a decrease in water consumption does not require an SEIS:

The LCLA Project FEIS and the Toquop Energy Project FEIS each employed a bounded analysis that evaluated the maximum potential environmental impacts of the respective projects. The BLM's bounded analysis of the LCLA Project evaluated the potential environmental impacts based upon the *maximum* amount of water that might ultimately be appropriated to the District by the Nevada State Engineer—up to 14,480 acre-feet per year from the Clover Valley Hydrographic Area, and up to 9,340 acre-feet per year from the Tule Desert Hydrographic Area (23,820 acre-feet per year total). FEIS at ES-6 to ES-7 and 1-7. This bounded analysis was entirely appropriate and necessary because it is undisputed that the amount of water ultimately appropriated for transmission through the pipeline in the ROW is entirely within the jurisdiction of the Nevada State Engineer. FEIS at ES-6 to ES-7 and 1-7; SOR at pp. 11-16.

Intervenors' Answer at 20.

We agree with the Intervenors that “[b]ecause Toquop’s *reduced* water needs obviously do not cause an increase beyond the upper threshold of the BLM’s bounded analysis in the LCLA Project FEIS, a[n] SEIS is unnecessary.” *Id.* at 20-21 (citing

¹³ The Intervenors contend that Appellants’ argument is based upon a mistaken understanding of a telephonic press conference held by Senator Harry Reid of Nevada, Mesquite Mayor Susan Holecheck, and Tony James, President and Chief Operating Officer of the Blackstone Group (parent company of TEL), announcing that, rather than a coal-fired plant, the TEP would consist of a 700 MW natural gas plant and a solar power plant with up to 100 MW of photovoltaic panels. Intervenors’ Answer at 18, Ex. E at 2, 3 (transcript). James stated that “the new plant uses 60% to 70% less water than the original plan.” *Id.*, Ex. E at 4. The Intervenors explain that “[i]t was the change in cooling and ventilation technology in 2006, not the reversion to a gas-fired facility that was approved in 2003, that caused the Toquop Energy Project’s projected water needs to be reduced by 60-70%.” Intervenors’ Answer at 19.

Hacienda Del Cerezo, Ltd., 135 IBLA 277, 279 (1996)). “BLM is not required to prepare a[n] SEIS when the ‘new’ circumstances do not affect the environment in a manner or to an extent not already considered by the BLM.” *Id.* at 21 (citing *Friends of the Bow v. Thompson*, 124 F.3d 1210, 1213 (9th Cir. 1997)). The change in the nature of the TEP, with the anticipated reduction in groundwater use, does not present new circumstances requiring supplementation of the FEIS.¹⁴

C. The FEIS Addressed a Range of Reasonable Alternatives

[5] In addressing Appellants’ argument that BLM failed to consider a range of reasonable alternatives, we begin with the proposition that under section 102(2)(E) of NEPA, BLM is required to consider appropriate alternatives to a *proposed action* and its environmental consequences. See, e.g., *Biodiversity Conservation Alliance*, 169 IBLA 321, 347 (2006). Such alternatives are deemed reasonable if they are able to accomplish the intended purpose, are technologically and economically feasible, and have a lesser impact on the environment. *Id.* (citing 40 C.F.R. § 1500.2(e)). As BLM states, under section 102(2)(E) of NEPA, “the intended purpose of a proposed action essentially defines the scope of alternatives analysis,” and when the range of alternatives is dictated by the stated goal of a project, “only those alternatives that accomplish the goal need be considered.” BLM’s Response at 17-18; see *Pit River Tribe v. BLM*, 30 F. Supp. 2d at 239-40; *Bristlecone Alliance*, 179 IBLA 51, 65 (2010); *Escalante Wilderness Project*, 163 IBLA 235, 240 (2004). BLM need not analyze environmental consequences of alternatives it has in good faith rejected as too remote, speculative, impractical, ineffective, or repetitive.

The Council on Environmental Quality (CEQ) regulations include a number of provisions which address the treatment of alternatives in environmental documents. An agency is required to “[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.” 40 C.F.R. § 1500.2(e). The section on alternatives “is the heart of the environmental impact statement.” *Id.* § 1502.14.¹⁵ BLM’s consideration of likely environmental impacts of

¹⁴ As we discuss *infra*, we do not view the LCLA Project and the TEP as “connected” actions. Appellants’ argument that BLM must supplement its environmental review because of a change in the TEP should be made in relation to the EIS undertaken for that project, rather than in relation to the independent LCLA Project.

¹⁵ BLM is required to:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(continued...)

a proposed action and its alternatives is subject to the “rule of reason.” *Center for Biological Diversity*, 162 IBLA 268, 286 (2004).

In evaluating the alternatives considered by BLM, we recognize that the LCLA Project’s purpose and need, consistent with congressional mandates set forth in the LCLA and LCCRDA, is to provide Lincoln County with the “transport of the groundwater resources by allowing for the construction of a groundwater development and conveyance system on public lands managed by the BLM.” FEIS at 1-3. More specifically, the FEIS states that the purpose of the LCLA Project “is to provide facilities for the production and transportation of water resources on and across areas of federal land,” including “construction and operation of a natural gas pipeline and metering facility . . . to serve planned development in the LCLA development area.” FEIS at 1-4 and ES-3; *see id.* at 2-1.

In responding to LCWD’s ROW application, BLM considered two alternatives, the Proposed Action and Alternative 1, as well as the No Action alternative of not approving LCWD’s application. FEIS at 2-1, 2-21. Under both the Proposed Action and Alternative 1, two pipelines would be constructed in Clover Valley, an area north of the Tule Desert, to collect water pumped from 15 possible groundwater production wells. FEIS at 2-1, 2-4, 2-5. The two pipelines would form a “V” with its connecting points near the southern end of the valley. *See* FEIS Map 2-1. The branch on the western side is generally within the LCCRDA corridor and the other branch extends north from the corridor before turning east. *Id.* A 100,000-gallon storage tank would be constructed below the confluence of the pipelines and a second tank of the same size would be located near East Pass where the pipeline crosses the Clover Mountains. FEIS at 2-7. At that point the water transmission pipeline is within the LCCRDA corridor and extends south within a corridor to a point about halfway through the Tule Desert. *Id.* Under the Proposed Action, the pipeline would shift to a

¹⁵ (...continued)

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency’s preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

southwesterly and then southeasterly trajectory until it reaches the proposed TEP power plant site, while under Alternative 1 the pipeline continues to follow and would remain entirely within the LCCRDA corridor. *Id.* Under both alternatives, groundwater also would be produced from 15 wells in the Tule Desert. FEIS at 2-1, 2-5.

The electric transmission line and fiber optic line proposed for Alternative 1 would be within the LCCRDA corridor and a new access road up to 5 miles in length would be constructed from the utility corridor to the northwest corner of the LCLA Area, also within the LCCRDA corridor, which would cross the Beaver Dam Slope Area of Critical Environmental Concern. FEIS at 2-21. In other respects Alternative 1 is like the Proposed Action. The pipeline would be buried 3 to 4 feet below existing grade and three times scour depth in washes, although suspended pipeline might be used where there is near surface hard rock or for crossing washes. FEIS at 2-5. Additional lateral pipelines would be built in the Clover Valley and the Tule Desert as needed to convey the produced groundwater to the primary pipeline. *See* FEIS at 1-2. Additional access roads to the wellsites would be needed, although their location would necessarily be different under the two alternatives. *See* FEIS at 2-10 to 2-11. And both alternatives include the construction of essentially the same pump station structure at each well site, overhead transmission and distribution lines to them, and booster stations. *See* FEIS at 2-2, 2-5, 2-6.

The FEIS provided a description and brief analysis of alternatives considered by an interdisciplinary team of specialists convened for the purpose of identifying potentially feasible alternatives, but eliminated those alternatives from detailed analysis during the NEPA process. BLM considered and rejected alternatives of constructing the water transmission pipeline above ground and burying the transmission and distribution lines. FEIS at ES-13 to ES-14, 2-21 to 2-22; ROD at unp. 10.

In addition, the FEIS includes an evaluation of a No Action alternative of not approving the application. However, BLM rejected the No Action alternative, given that the NSE had already granted LCWD and VWC water rights of 2,496 AFY of groundwater from the Tule Desert Hydrographic Basin, and, as importantly, because the No Action alternative would neither preclude LCWD from pumping water on non-Federal land using their permitted water rights, “nor would it preclude another entity from constructing other projects within the same corridor.” ROD at unp. 10; *see* FEIS at ES-13, 2-21.

From the outset of the NEPA process, Appellants raised various concerns about the need to address a range of alternatives. For example, in providing comments on the scope of the DEIS, the Sierra Club stated that the document “should take a hard look at the other water supply options for the proposed LCLA development,”

including “groundwater from other sources than Tule Desert and Clover Valley.” AR 5.4.3 SC 17L (Apr. 20, 2006, scoping comment 7) at unp. 4. They also proposed that “[t]he range of alternatives should include full build-out, 50% build-out and a development limited by actual water rights approved by the NV State Engineer.” *Id.*; *see also* AR 7.6.13 at 2-3 (comments on DEIS). In commenting on the DEIS, the Sierra Club pointed out that various members of the public had suggested other alternatives, “including different water sources for the LCLA parcel, a range of water amounts to be transported (from the 2,100 afy approved by the . . . NSE to the full amount requested by the proponent) through the ROW, and a phased in water-transport, corresponding with the phased in LCLA development.” AR 7.6.13 at 2 (July 14, 2008). The CBD criticized the DEIS for not including “alternatives that will avoid or minimize impacts to rare, sensitive and special status species.” AR 7.6.8 at 3 (July 22, 2008). In jointly commenting on the FEIS, Appellants asserted that BLM had an obligation to “consider a meaningful conservation alternative that protects groundwater resources,” and criticized the two alternatives in the document as “identical with regard to air and groundwater resources.” AR 9.4.2 at 4. They further asserted that “BLM must examine an alternative that represents the most protective alternative allowable under FLPMA and other non-discretionary statutes.” *Id.*

In their SOR, Appellants again criticize the FEIS for considering only one alternative and for not including alternatives they and others had suggested “that would involve a smaller amount of permitted water rights or phased in water-transport” and “have fewer impacts on surface or ground water resources.” SOR at 10-11. They argue that such alternatives are reasonable because they “stake a middle ground between the No Action alternative, which essentially calls for no water-transport, and both the Proposed Action and Alternative 1, both of which propose the full pumping of [the] 23,820 afy requested” from the NSE. SOR at 11. They assert that the 9,340 AFY requested for the Tule Desert Hydrographic Basin “has since been drastically reduced as a result of rulings” of the NSE, and that the alternatives of pumping a lesser amount or a plan of phased-in development would be consistent with the ruling. *Id.* (citing FEIS at 1-7). Appellants go further in claiming that the NSE’s rulings not only show the reasonableness of their suggested alternatives, but also “show that there simply is not the amount of water available as contemplated by the proposed Project.” *Id.* They claim that a reduced-water alternative would “all but eliminate the need for a project at this scale,” *id.*, and that a smaller pipeline would “minimiz[e] the Project’s adverse environmental consequences as a whole.” *Id.* at 12. Appellants argue that BLM has failed to explain why it rejected their suggested alternatives. *Id.* at 12-13.

BLM defends the FEIS by pointing out that the selection of alternatives is controlled by the Proposed Action. BLM’s Response at 17 (citing *Biodiversity Conservation Alliance*, 174 IBLA at 25; *Biodiversity Conservation Alliance*, 169 IBLA

at 347; *Escalante Wilderness Project*, 163 IBLA at 240); BLM's Response to Order at 15. BLM emphasizes, as we have noted, that "the intended purpose of a proposed action essentially defines the scope of alternatives analysis"; that "the range of alternatives is dictated by 'the stated goal of a project'"; and that only those alternatives that accomplish the goal need be considered. BLM's Response at 17-18 (quoting *Pit River Tribe v. BLM*, 30 F. Supp. 2d at 939-40).

As we stated in *Biodiversity Conservation Alliance*, 174 IBLA at 25, an appellant is obligated to show that a viable alternative has been proposed. The U.S. Supreme Court observed in *Vermont Yankee v. NRDC*, 435 U.S. at 551, that the alternatives analysis "cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man," and that "[t]ime and resources are simply too limited to hold that an impact statement fails because the agency failed to ferret out every possible alternative." With regard to the LCLA Project, BLM responded to each comment to the DEIS in the context of the intended purpose of the Project. See FEIS App. F. The fact that BLM rejected those alternatives does not mean that BLM failed to fully analyze reasonable alternatives in the FEIS, in light of the Project's purpose and need, as required by NEPA. See *Northern Alaska Environmental Center v. Kempthorne*, 457 F.3d 969, 978 (9th Cir. 2006).

We agree with BLM that "none of the highly conceptual and inexact suggested 'alternatives'" offered by Appellants "led to a clear alternative that BLM should have considered." BLM's Response at 18. Thus, BLM is correct that Appellants' first suggestion that BLM review an alternative that would lessen the environmental impacts "is an abstract statement, not an alternative." *Id.* Likewise, the suggested "alternatives" on page 78 of Appendix F of the FEIS "are equally inexact and do not require further BLM review." *Id.* For example, the suggestion that BLM should look for different water sources for the LCLA "parcel" contains no specificity as to what exactly the commenter intends as an alternative. The comment does not explain what water sources would serve as a viable alternative to those identified in the Proposed Action, or should have received further review. See FEIS App. F at 78. As BLM notes, BLM "is not the project proponent and [is] not responsible for finding water sources for the LCLA Development Area." BLM's Response at 20.

We fail to see the need to consider alternatives involving other amounts of water to be transported through LCWD's proposed pipeline, as argued by Appellants, given that BLM's analysis is based on the reasonably foreseeable impacts of LCWD's proposal to transport up to 23,820 AFY of water. Appellants assert that "a smaller water-transport alternative would still allow the development area to receive the full amount of water, and phased in water-transport would still allow the development area to grow because the construction and development would be tied together." SOR at 12. The inherent weakness in the "smaller water-transport alternative" lies

in BLM's obligation under NEPA to analyze alternatives that will meet the purpose and need of the project as proposed by LCWD. As BLM notes, its primary area of review for the general route of the proposed ROW lies within a congressionally designated utility corridor. BLM identified water sources that would potentially meet the needs of the LCLA Area as it experiences growth and development. The rights to the necessary water is an issue to be resolved between the LCWD and the NSE, depending on such factors as water drawdown and perennial yield. The Board's role is to determine whether BLM took a hard look at the reasonably foreseeable impacts resulting from LCWD's appropriation and use of the water for which it has projected a need.

The project proposed by LCWD is based upon the reasonably foreseeable development needs of the LCLA Development Area. To correlate the size of the water pipeline ROW with the amount of currently available water would not meet the purpose and need of the project. A "smaller water-transport alternative," such as suggested but not cogently explained by Appellants, could very well prove inadequate over the long-term for the development needs in the LCLA Development Area, resulting in the re-disturbance of the ROW corridor for purposes of expanding its size and infrastructure. LCWD framed its project in terms of how much development is reasonably anticipated, and how much water will be required for such development. This bounded analysis reflects the need to construct a pipeline and associated utilities that will "help meet current and future municipal water needs in newly urbanizing areas . . . in the LCLA Development Area, north of Mesquite." FEIS at 2-1.

Appellants contend that the infrastructure needed for transporting a lesser amount of water to the LCLA Development Area would result in lesser impacts. However, BLM makes the valid point that Appellants fail to show that this "smaller water-transport alternative," SOR at 12, "would result in any substantively different environmental impacts not already analyzed." BLM's Response at 19. Thus, states BLM, "[i]f a lesser amount of water would still require the same type of water transport facilities, the basic environmental impacts would be akin to the proposed action." *Id.* BLM asserts that Appellants have not pointed to likely impacts not already encompassed within the proposed action, and that "[a]n agency need not, therefore, discuss alternatives similar to alternatives already considered." *Id.* (quoting *Northern Alaska Environmental Center v. Kempthorne*, 457 F.3d at 978). LCWD's proposed action states the need for 23,820 AFY of water, and the Proposed Action envisions infrastructure capable of transporting up to that amount of water. Whether LCWD's application for that amount of water is approved is within NSE's purview. FEIS at ES-6, 1-6.

In responding to Appellants' argument that BLM should have considered a pipeline that would transport only the water that was in fact approved by NSE, or

one that calls for phased construction, BLM provides the following analysis, with which we agree:

[T]o a degree the BLM's final decision does take into account the possibility of lesser amounts of water or phasing of water development construction. Actions on BLM managed land will be in accordance with a BLM approved Plan of Development which could very likely call for phased construction of LCWD's project in accordance with available water. ROD at 4. Also, BLM clearly identified the need for LCWD to attain the appropriate water appropriation and importation permits from the Nevada State Engineer as approvals necessary to implement the proposed action. FEIS at 1-17. The final Plan of Development should reflect such approvals and the nature of those approvals should be reflected in the final project design. Based on this, and the alternative to the possible routing of the LCWD's project, the BLM has reviewed alternatives that fostered informed decision-making and informed public participation, while staying true to the proposed action and the LCCRDA. *See Westland Water Dist. [v. Dep't of the Interior]*, 376 F.3d [853,] 872 [(9th Cir. 2004)].

BLM's Response at 20.

BLM and the Intervenor criticize Appellants' suggested alternatives for failing to recognize that BLM has no control over the water sources selected by the project proponent and that the NSE has authority over the right to pump groundwater. BLM's Response at 19-20; Intervenor's Answer at 24-25. The Intervenor emphasize that the FEIS evaluated groundwater impacts by looking at the maximum amount of water that may be approved by the NSE, thereby including the possibility of transporting less water. Intervenor's Answer at 25-26. BLM contends that its decision "does take into account the possibility of lesser amounts of water development" because construction will occur "in accordance with a BLM approved Plan of Development which could very likely call for phased construction of LCWD's project in accordance with available water." BLM's Response at 20. BLM states that further water appropriation approvals by the NSE "should be reflected in the final project design" set forth in the final POD. *Id.*

As the Intervenor point out, LCWD and VWC applied for an ROW "for the purpose of developing and conveying" water from wells in the Tule Desert and Clover Valley as permitted by the NSE. FEIS at ES-3. The POD they submitted to BLM identifies the elements of the Proposed Action reviewed in the FEIS. *See* FEIS at 1-3. We conclude that Appellants have not demonstrated that a reasonable alternative existed, which BLM failed to adequately consider. *See, e.g., Backcountry Against Dumps*, 179 IBLA 148, 175 (2010).

D. BLM Took a Hard Look at Significant Environmental Impacts

An EIS must “provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1; *see Bristlecone Alliance*, 179 IBLA at 73, and cases cited. The required discussion must include an analysis of “direct effects,” which are “caused by the action and occur at the same time and place,” as well as “indirect effects” which are “later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. §§ 1502.16 and 1502.8; *see Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 963 (9th Cir. 2002); *Bristlecone Alliance*, 179 IBLA at 73. Further, an EIS must consider the cumulative impacts of the proposed action together with past, present, and reasonable foreseeable future actions, including all federal and non-federal activities. *See* 40 C.F.R. § 1508.7; *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 994 (9th Cir. 2004); *Kern v. BLM*, 284 F.3d 1062, 1075 (9th Cir. 2002); *Bristlecone Alliance*, 179 IBLA at 73.

1. BLM Properly Identified its Baseline for Water Resources

An analysis of whether BLM took a hard look at the reasonably foreseeable environmental consequences of approving the LCLA Project properly begins with Appellants’ argument that BLM failed to establish a meaningful environmental baseline against which to predict and evaluate environmental impacts. Relying upon *Half Moon Bay Fisherman’s Marketing Ass’n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988), Appellants fault BLM for basing its estimated groundwater recharge in the Tule Desert (about 6,000 AFY) on a synthesis of conflicting studies ranging from 2,100 AFY to 10,000 AFY, stating that “a synthesis of highly-variable data does not provide an accurate basis from which to assess an environmental baseline.” SOR at 19 (citing FEIS at 3-30). Further, they claim that the baseline defined in the FEIS is inaccurate because it fails to distinguish between groundwater recharge and perennial yield, with “[t]he perennial yield of a groundwater reservoir [being] defined as the amount of water that can be extracted in the long term without reducing the water level.” SOR at 20. Appellants argue that “BLM failed to calculate perennial yield and instead estimated water resources based solely on groundwater recharge rates,” so that “the EIS did not measure the amount of water that can be extracted from the area without draining groundwater levels.” *Id.*

Appellants state that based on additional studies, the NSE “established that the ‘perennial yield of the Tule Desert Hydrographic Basin is 2,500 acre-feet’”; that “[c]urrent appropriations in the basin total 2,104 afy”; and that “on that basis, the State Engineer granted the remaining 396 AFY to the applicants.” *Id.* (quoting Ruling No. 5986 at 20). Appellants claim that “[t]his new information was not considered by BLM in the environmental review which assumed a far higher amount

of water would be allocated to the applicant.” *Id.* They assert that “BLM has no firm basis for the variable position it has taken absent preparation of a full independent analysis, which is lacking here.” *Id.* at 22.

In addition, Appellants fault BLM for its failure “to give any consideration to federal reserved water rights in determining the environmental baseline.” *Id.* They state that “Federal reserved water rights may potentially be asserted at any time,” and that “[a]lthough Appellants have repeatedly urged BLM to do so, BLM has not yet asserted its reserved water rights in the affected areas.” *Id.* at 21. They claim that by failing “to discuss its duty to protect reserved rights and potential effects of the project on these potentially important federal reserved water rights,” BLM has “failed to identify a proper environmental baseline as regards water rights in violation of NEPA.” *Id.* Appellants conclude that BLM violated NEPA because it “failed to provide the necessary identification and analysis of water rights including the federal reserved rights in the baseline and failed to consider these issues in the alternatives analysis so as to avoid or minimize impacts that will result from the expected water extractions.” *Id.* at 22.

BLM responds that the FEIS presents a “very thorough analysis of available information to establish the general status quo of the water resources” related to the Proposed Action, noting that “Chapter 3 of the FEIS contains 30 pages of analysis and description of the status of water resources associated with LCWD’s project.” BLM’s Response at 30; *see* FEIS at 3-12 to 3-42. BLM disagrees with Appellants’ assertion that its estimate of groundwater recharge for the Tule Desert is based on information that is too “highly-variable,” stating that Appellants present an inaccurate summation of BLM’s AFY estimate. BLM’s Response at 30. Rather, BLM states that the FEIS “identified a potential range of between 3,500 and 10,000 AFY, which had been further refined through analysis to between 4,000 and 8,000 AFY, and most of the analysis BLM reviewed that looked at this range focused in on 6,000 AFY.” *Id.* (citing FEIS at 3-30). Further, the FEIS explained that the “recharge rates were calculated by physically based water balance models; by empirical models based on transfer equations . . . ; by chloride measurements in precipitation, runoff, soil, and groundwater; and by analysis of infiltration from surface runoff.” *Id.* BLM distinguishes *Half Moon Bay v. Carlucci*, in which the Ninth Circuit found baseline information to be inadequate because it did not include specific quantitative information, on the basis that BLM clearly provided such information.

A glance at Chapter 3 of the FEIS, which describes “the affected environment associated with the Proposed Action and alternatives,” FEIS at 3-1, shows the error in Appellants’ argument that BLM failed to establish an appropriate environmental baseline. The FEIS states that the provided “information serves as a baseline from which to identify and evaluate environmental changes resulting from the Proposed Action and alternatives,” and that “the baseline conditions, for the purposes of

analysis, are the conditions that currently exist.” *Id.*; see *Half Moon Bay v. Carlucci*, 857 F.2d at 510-511 (an agency complies with NEPA by establishing the baseline conditions which allow an agency to determine what effect the proposed action will have on the environment). BLM analyzes the environmental impacts of the Proposed Action by comparing the baseline conditions to the conditions expected to result from implementation of the Proposed Action. FEIS at 4-6 to 4-20. BLM’s review of such environmental impacts includes data and information regarding surface water resources, local and regional springs, surface and groundwater quality in the four affected hydrographic basins, and issues related to recharge and perennial yield. FEIS at 3-12 to 3-42.

BLM disagrees with Appellants’ assertion that its baseline is inadequate because BLM failed to distinguish between groundwater recharge and perennial yield. BLM states that its definition of perennial yield, which is provided by the NSE, can conveniently be found in the FEIS:

The perennial yield of a groundwater reservoir may be defined as the maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded groundwater levels will decline.

FEIS at 3-41 (citing NSE conclusions). The FEIS sets forth the perennial yield and permitted annual duty of water for the four hydrographic basins related to LCWD’s proposed project, *i.e.*, Clover Valley, Tule Desert, Virgin River Valley, and Lower Meadow Valley Wash. BLM’s Response at 31; see FEIS at 3-41 to 3-42; *id.*, Table 3-10.

BLM explains that its analysis providing potential recharge rates for the Tule Desert Hydrographic Basin is based on new studies as of 2008. See FEIS at 3-30. BLM acknowledges that the information cited in the FEIS may “lead to different conclusions about the available perennial yield,” and may affect future decisions of the NSE regarding the appropriation of water rights for Tule Desert. BLM’s Response at 32. BLM further states that its analysis of current conditions explains why “further water applications by LCWD are currently being held in abeyance subject to further analysis and determination by the Nevada State Engineer.” *Id.*

With regard to Appellants’ assertion that BLM failed to consider Federal reserved water rights, BLM states that it “is simply inaccurate or without support.” BLM’s Response at 32. Appellants’ argument must be viewed against the fact that no Federally reserved water rights in the project area have ever been asserted or

adjudicated.¹⁶ See SOR at 21; FEIS App. F at Comment Letter 8. BLM disagrees with Appellants' contention, as do we, that "potential federal reserved water rights, which have not been previously asserted by the Federal government, must be specifically identified in a particular baseline to support a finding of an adequate hard look analysis." BLM's Response at 33. Appellants' claim that they have "repeatedly urged" BLM to assert its reserved water rights is not supported by any citation to the record or any other evidence. Appellants cite no authority for their argument that because BLM may someday assert a reserved water right to groundwater or surface water associated with public lands affected by the LCLA Project, BLM is required to hold the Project in abeyance. We agree with Intervenor that this is an "incredible position." Intervenor's Answer at 40.

In light of our review of the FEIS, we conclude that Appellants have not demonstrated that BLM failed to adequately establish baseline conditions for the Project area and to take a hard look at the environmental consequences reasonably expected to result from implementation of the Proposed Action. Our review of the FEIS confirms BLM's assertion that Appellants have "not shown that BLM failed to provide the necessary quantitative information to form a baseline on which to assess the proposed projects impacts against, or failed to take a hard look at that information." BLM's Response at 32 (citing *Half Moon Bay*, 857 F.2d at 510; *IMC Chemical, Inc.*, 155 IBLA at 195). The FEIS provides an assessment of the updated information utilized by LCWD to support the water applications it has on file with the NSE, and has analyzed potential impacts based upon that assessment. See FEIS at 4-6 to 4-21.

2. *The LCLA Project and the TEP are not "Connected Actions"*

[6] Appellants argue at length that the FEIS should have included an analysis of the environmental impacts of the TEP as a connected action under 40 C.F.R. § 1508.25(a)(1).¹⁷ They assert that "the pipeline is a necessary element of the

¹⁶ As noted by Intervenor, a Federal reserved water right arises in the following situation: "[W]hen the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation." Intervenor's Answer at 39-40 (quoting *Cappaert v. United States*, 426 U.S. 128, 138 (1976)).

¹⁷ Actions are to be considered connected if they:

- (i) Automatically trigger other actions which may require environmental impact statements;
- (ii) Cannot or will not proceed unless other actions are taken

(continued...)

groundwater pumping proposals,” and that the TEP is one of the projects the water is intended to promote. SOR at 22-23. In particular, they note that the route chosen for the pipeline varies from the LCCRDA corridor in order to provide water for the TEP. For support, they point to the FEIS, which states: “Approval of the Proposed Action would eliminate the need for a separate water pipeline for the [TEP] and would allow for water from either the Clover Valley or Tule Desert Hydrographic Areas to serve the power plant.” SOR at 23 and n.15 (quoting FEIS at 4-65). This fact, they maintain, “supplies the primary rationale for the Agency’s preference for the Proposed Action over the other alternatives,” and shows that the LCLA Project and the TEP should have been considered together in a single EIS. SOR at 23, 26-27 (“the alignment in the Proposed Action would not have been selected but for the [TEP]”).

Appellants argue that the failure to provide a combined analysis of both projects is important because, according to the FEIS, the Proposed Action approved by BLM will have a number of environmental impacts that are greater than those for Alternative 1, in particular the disturbance of a larger area of desert tortoise habitat. SOR at 23-25. They further point out that the “technological advantages” the FEIS describes for the Proposed Action over Alternative 1 pertain to only the portion of the pipeline running east from the LCCRDA corridor to the LCLA Development Area, indicating that the routing of the pipeline to the TEP site means that the TEP is a connected action. SOR at 25; see FEIS at ES-14, 2-23.

Appellants argue that the factual situation is similar to *Thomas v. Peterson*, 753 F.2d 754, 758-59 (9th Cir. 1985), and *Save the Yaak Committee v. Block*, 840 F.2d 714, 720 (9th Cir. 1988), cases in which the disputed actions were found to be “inextricably intertwined” and, therefore, were connected actions within the meaning of the CEQ regulations because one would not occur without the other. SOR at 25-26. They further argue that alignment of the ROW for the LCLA Project with that of the TEP establishes that the two projects do not have “independent utility,” as was the situation in *Northwest Information Center, Inc. v. National Marine Fisheries Service*, 56 F.3d 1060, 1068-69 (9th Cir. 1995), and *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989), in which each project could be undertaken without the other, “although each would benefit from the other’s presence.” SOR at 26-27.

¹⁷ (...continued)

previously or simultaneously;

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

40 C.F.R. § 1508.25(a)(1).

BLM's position is that, although the TEP plant may use water conveyed by the LCLA pipeline, the purpose of the LCLA ROW is to provide water for local communities, including the LCLA Development Area, and it asserts that neither LCWD nor BLM has identified the TEP as an "integral part of the proposed water pipeline project." BLM's Response at 12-13. BLM relies upon the Ninth Circuit's "independent utility" test discussed in *Earth Island Institute v. U.S. Forest Service*, 351 F.3d 1291, 1305 (9th Cir. 2003), and *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 894 (9th Cir. 2002), and other cases, including those cited by Appellants. BLM's Response at 14-16. Under the test, BLM argues, the TEP and the LCLA water pipeline are not connected actions because each project would go forward without the other. BLM states that it approved the TEP ROW before the current LCWD request was submitted; that BLM's approval "was obviously not made in contemplation of LCWD's proposed project"; and that the TEP "can proceed under its own rights-of-way independent of the LCWD water pipeline proposal." *Id.* at 15. Conversely, BLM claims, whether the TEP "is constructed or not does not control the future of the LCWD project." *Id.* at 16-17.

We agree with BLM that the only connection that Appellants can rely upon to make the argument is based upon BLM's selection of the LCWD's water line routing for approximately the last third of the line. *Id.* at 15; *see* SOR at 26-27. Routing the pipeline through the Tule Desert to the TEP site under the Proposed Action using the same corridor "to avoid future unnecessary environmental impacts," rather than continuing within the LCCRDA corridor, does not establish that they are connected actions. *Id.* at 16. The FEIS reviews BLM's rationale for selecting the preferred routing of the LCWD's water pipeline rather than the route described in Alternative 1, which would have kept the pipeline within the LCCRDA utilities corridor to the point of the LCLA development. *See* FEIS Map 1-1. The FEIS explains that the proposed route would result in the delivery of water and power to the LCLA Development Area at a location on the ground that has technological advantages over Alternative 1. FEIS at 2-23. Those advantages include: (1) the superior elevation of the proposed route offers better elevation, which is necessary and beneficial for engineering the water transmission and distribution system into the LCLA Development Area; (2) electrical power for the well fields could be routed out of an existing electrical substation located near the southeastern boundary of the LCLA Development Area; and (3) routing the water pipeline through the Tule Desert area, as proposed by LCWD, would eliminate the need for a separate water pipeline for the TEP. *Id.* at 4-65.

BLM states that Appellants have "seized upon that last factor, and what most would likely consider smart land use planning and utilization, as a basis to establish the Toquop Plant and the LCWD water line as connected actions." BLM's Response at 16 (footnote omitted). We agree with BLM that "[r]outing two similar rights-of-way into the same corridor to avoid future unnecessary environmental impacts does not

establish the two right-of-way holders' projects as connected actions." *Id.* BLM is correct that the LCLA and TEP projects present "a situation much like the *Sylvester* case mentioned above," in that "[t]he two projects may benefit each other, but the mere benefit does not establish the lack of independent utility." *See Sylvester*, 884 F.2d at 400. BLM's reasoning is convincing:

Nothing Appellant has argued results in finding that neither project would progress without the other. Stated another way, the two projects are not so *inextricably intertwined* that they would not occur *but for* the other. . . . The LCWD water pipeline is to provide water for public use and assist in the development of the LCLA Development Area. FEIS at 1-4. Whether the Toquop Energy Project is constructed or not does not control the future of the LCWD project. The LCWD water pipeline project is a functionally independent project.

BLM's Response at 16-17. In routing the LCWD project through the same previously approved TEP water pipeline ROW, BLM has sought to reduce the need for separate water pipelines and the related environmental impacts of additional projects.

Intervenors present arguments that are persuasive in showing that the LCLA Project and the TEP are independent. They assert that the Proposed Action for the LCLA Project "provides the infrastructure necessary for groundwater delivery to the LCLA geographic area and was designed, planned, and sited in response to the congressional enactment of the LCCRDA in 2004," while the ROW for the TEP was approved in 2003 and "has always been an independent project, with its own separate rights-of-way." Intervenors' Response at 12-13. They point out that the TEP ROW includes "a right to construct, maintain, operate, and terminate a buried 24-inch water pipeline that will supply water from the well field to the power plant." *Id.* at 13 (quoting Ex. B (one of three ROW permits effective Dec. 2, 2003)). Intervenors assert that "if the LCLA Project ceased to exist tomorrow, the [TEP] would still go forward," and that if the TEP were abandoned, there would be "no effect upon the purpose and need for the LCLA Project to provide for the conveyance of groundwater to the LCLA development area." *Id.*¹⁸ Intervenors discuss the cases

¹⁸ We agree with Intervenors that Appellants' reliance upon *Save the Yaak Committee v. Block*, 840 F.2d at 720, and *Thomas v. Peterson*, 753 F.2d at 758, is misplaced. Both of those cases involved logging projects and corresponding logging roads meant to service the logging project. In both cases, the logging roads would not have been built (*Thomas v. Peterson*) or improved (*Save the Yaak Committee*) had the logging project the road sought to service not been approved and developed. These cases demonstrate the "but for" relationship required to render two projects "connected actions," as a logging road would not be constructed or improved without the logging

(continued...)

cited by Appellants to conclude that none “support the notion that if the BLM elects to co-site two independent projects in order to reduce impacts, the projects are rendered connected actions.” *Id.* at 16. The record shows that “the Project will move forward and serve customers in the LCLA area regardless of what occurs with respect to the [TEP], and vice versa.” *Id.* at 16-17.

BLM admits that routing the pipeline through the Tule Desert to the TEP site under the Proposed Action “would eliminate the need for a separate water pipeline.” BLM’s Response at 16. Some components of the two Projects are to be coordinated in order to *reduce* unnecessarily duplicative environmental impacts. However, BLM and Intervenor make a convincing case that such coordinated efforts are neither required nor necessary for either the LCLA Project or the TEP to go forward; in fact, the record makes clear that either project would go forward in the absence of the other. *See Earth Island Institute v. U.S. Forest Service*, 351 F.3d at 1305; *Native Ecosystems Council v. Dombeck*, 304 F.3d at 894; *Northwest Resource Information Center, Inc. v. National Marine Fisheries Service*, 56 F.3d at 1064; *Great Basin Mine Watch*, 456 F.3d at 969. BLM has considered the environmental impacts of each project through two separate EISs. We conclude that Appellants have not shown that considering the two projects in a single NEPA document will show environmental impacts not already addressed in the separate environmental studies.

3. Cumulative Impacts of the Project and Other Groundwater Development Projects

[7] Appellants argue that “BLM failed to consider cumulative impacts of the proposed Project together with other past, present, and future water development projects in southern and eastern Nevada.” SOR at 13. They assert that “[a]lthough the FEIS acknowledges that there will be long term impacts from other groundwater development projects in the area, it does not discuss specific projects,” and that in order to comply with NEPA, “BLM was obligated to assess the cumulative impact of all groundwater pumping projects and pipeline projects in the area.” *Id.* at 14.

a. Potential Hydrologic Connectedness of Groundwater Sources

Appellants fault the cumulative impacts analysis in the FEIS because it “omits consideration [of] groundwater development water projects that could have hydrologic connections with water sources implicated by the Project,” including the Clark, Lincoln, and White Pine Counties Groundwater Development Project proposed

¹⁸ (...continued)

project to service. By contrast, the LCLA Project and the TEP can each go forward without the other. *See also, e.g., Western Watersheds Project*, 175 IBLA 237, 253 (2008).

by the Southern Nevada Water Authority (SNWA Project) and the Kane Springs Project proposed by the LCWD. *Id.* (citing FEIS at 4-67). Appellants argue that they have submitted evidence that shows that the groundwater sources for the SNWA and Kane Springs Projects are connected to the basins from which the Project will obtain its groundwater, and that BLM should have considered those interconnections in its cumulative impacts analysis. According to Appellants, “[t]he development associated with these additional water pumping and pipelines projects may increase water demands by making industrial development and other development possible in areas that previously would not have been developed.” SOR at 15. They state that “[i]f, as the evidence indicates, these water basins are connected to those in the study area, there will likely be a cumulative lowering of water levels in conjunction with the proposed action that was not considered or analyzed in the FEIS.” *Id.* They complain that “[t]he FEIS indisputably does not address the all-but-inevitable development projects that will be made possible in part by the ROW, acknowledging only that the ROW may have the direct impact of lowering the water table, and indirect impacts related to lower water yield.” *Id.* at 15-16 (citing FEIS 4-69 to 4-70).

Our review of the FEIS shows that BLM’s cumulative impacts analysis with regard to the potential interconnectedness of groundwater projects meets the hard look standard of NEPA. BLM set forth its cumulative impacts analysis in two comprehensive sections devoted to direct impacts and indirect impacts, respectively, of the various interrelated projects. *See* FEIS at 4-69, 4-70. Particular projects which BLM considered to have a combined impact with the proposed action included the Virgin and Muddy Rivers Surface Water Development Project, with existing and future groundwater pumping rights, and the potential construction of the TEP with its own water pipeline to serve the plant. *Id.* at 4-69. BLM obtained from the Nevada Department of Water Resources the total perennial yield, the total permitted water rights, plus the total of all pending water applications for each of the four hydrographic areas determined by BLM to be within the region of influence for the cumulative impacts area. *Id.* at 4-59, 4-70, and Table 4-6.

The FEIS included BLM’s assessment that the Kane Springs and SNWA Projects would likely have a “long-term impact” on water resources in the project area, *id.* at 4-67 and Table 4-5, and acknowledged that there could be a decline in local and regional groundwater levels and flows at down-gradient locations as a cumulative impact. *Id.* at 4-69. However, BLM emphasized that to date there was no completed modeling analysis related to groundwater developments in the four hydrographic areas. *Id.* at 4-70. BLM noted that the NPS was in the process of modeling regional flow systems in the area, and proceeded to describe the coordinated effort between LCWD and the NPS to monitor, manage, and mitigate unanticipated impacts due to LCWD’s proposed development in the Tule Desert Hydrographic Basin. *Id.*

We have noted Appellants' principal argument with regard to cumulative impacts, *i.e.*, that BLM improperly determined that the SNWA and Kane Springs groundwater development projects were in separate hydrologic basins with distinct groundwater flow systems. *See* SOR at 14; FEIS at 4-70. Appellants support their contention with "evidence," submitted with their comments to BLM, that the basins *may* be connected. SOR at 14. According to Appellants, if there is a question about the hydrologic interconnection then the FEIS analysis should have defaulted to including the basins into the cumulative impacts section. *Id.* at 15. BLM responds that "Appellant's default premise is not a recognized standard of which BLM must comply, and Appellant has provided no case law to support such premise." BLM's Response at 22.

In asserting that the hydrologic basins may be connected, Appellants rely upon an article by James E. Deacon, *et al.*, entitled *Fueling Population Growth in Las Vegas: How Large-Scale Groundwater Withdrawal Could Burn Regional Biodiversity*, 57 *BIOSCIENCE* 688 (September 2007) (Deacon Article). While this article provides a general discussion about groundwater withdrawal in southern Nevada, Appellants do not explain its application to the LCLA Project. The Deacon Article does not demonstrate error in BLM's determination that groundwater withdrawals related to the SNWA and Kane Springs Projects would occur in hydrologic basins located in groundwater flow systems separate from the LCLA Project area. Appellants do not show how the article undermines BLM's consideration of the geology, hydrogeology, and the possible flow patterns of groundwater in the LCWD Project area. We agree with BLM that the Deacon Article represents "a generalized opinion about the issue of groundwater flow and withdrawal," and that "[t]o the extent this article may represent a different opinion, such opinion would not be a basis to overrule the BLM's analysis." BLM's Response at 25.

In its October 29, 2010, Order, with regard to whether other groundwater development projects should have been addressed because of their hydrological connection to the LCLA Project, the Board requested "the parties . . . to precisely identify those statements in the FEIS which are at issue." Order, IBLA 2010-86, at 3. In response to the Board's Order, Appellants assert that "[t]he issue is . . . that *all of the flow systems at issue* are hydrologically connected up and down gradient—which is well established." Appellants' Consolidated Brief at 9. Appellants state that the Meadow Valley Wash and Virgin River Valley Flow Systems, where the LCLA Project is located, are both hydrologically connected to the lower part of the White River Flow System; that the White River Flow System, where the Kane Springs Project and part of the LCLA Project are located, is also hydrologically connected to the lower White River Flow System; and that

all of these proposed groundwater projects may have significant cumulative effects on the surface and groundwater on the lower White River flow system and the lower Virgin River, which are both areas that are already impacted by other groundwater pumping projects and support springs and surface waters on public lands that provide habitat for rare and imperiled species.

Id. (footnote omitted). Appellants quote extensively from their comments on the DEIS to demonstrate that they provided significant information and data regarding potential cumulative impacts of the LCLA Project together with impacts of other groundwater pumping projects on interconnected flow systems, and that the issues raised by Appellants were ignored by BLM. The record shows otherwise.

BLM observes that the precise FEIS statement disputed by Appellants is the following: “Groundwater withdrawals associated with these projects would occur in hydrologic basins located in separate groundwater flow systems (White River Flow System and Great Salt Lake Desert Flow System). Therefore, these projects are not considered in the cumulative impacts analysis.” BLM’s Response to Order at 10; *see* FEIS at 4-70. BLM then provides a detailed review of relevant FEIS sections that describe the groundwater flow systems that may be impacted by the LCLA Project, based upon “geology, hydrology, and hydrogeology.” BLM’s Response to Order at 10; *see* Chapter 3 of the FEIS, with accompanying Figures and Maps. What seems clear from the highly technical review provided by BLM is that “these neighboring systems do not all commingle seamlessly.” BLM’s Response to Order at 10.¹⁹ BLM provided detailed assessments of the direction of flows related to the Meadow Valley Wash and Virgin River Valley Flow Systems, relying upon many sources and reports relevant to the geographic areas in question. *Id.* at 13 and authorities cited therein. We agree with BLM’s conclusion that, at a minimum, BLM has presented “sufficient evidence” to support its conclusion that the Meadow Valley Wash and Virgin River Valley Flow Systems are geographically separated to some extent from the White River Flow System, and further that “BLM has provided a rational explanation as to why there would not likely be impacts to assess from groundwater projects pumping from the

¹⁹ BLM cites to a 1995 USGS Report by Michael D. Dettinger, *Distribution of Carbonate-Rock Aquifers and the Potential for their Development, Southern Nevada and Parts of Arizona, California, and Utah*, U.S. Geological Survey Water-Resources Investigations Report 91-4146 (1995), that

confirms that there is a geologic boundary preventing interconnection between the Tule Desert carbonate groundwater east of the Mormon Mountains (where the Meadow Valley Wash and Virgin River Valley Flow systems run) from easily moving west, which is where the White River Flow system is located.

BLM’s Response to Order at 11.

White River Flow System, and the proposed project which is to pump from the Meadow Valley Wash and Virgin River Valley Flow System.” *Id.* at 14.

BLM provides a thorough discussion of the concepts of local, intermediate, and regional groundwater flow systems. *See* FEIS at 3-24. BLM then explains that the Clover Valley Hydrographic Basin is included in the broader Meadow Valley Wash Flow System, while the Tule Desert Hydrographic Basin is included in the Virgin River Valley Flow System. These broader-based flow systems are related to the intermediate flow systems. *Id.* BLM uses a figure to illustrate the conceptual flow-path for local, intermediate, and regional groundwater flow paths as related to the geography and geology in and around the Project area. *Id.*, Figure 3-8.

Further, BLM employs a stratigraphic column figure to describe the generally understood breakdown of the geologic units and potential hydrological significance with respect to local springs and surface water in Clover Valley. *Id.* at 3-17; *id.*, Figure 3-9. BLM also provides a model depicting the north to south flow pattern of groundwater through the Clover Valley area, which is the same flow pattern in the Lower Meadow Valley Wash hydrographic area just south of Clover Valley. *Id.* at 3-28.

Additionally, BLM reviews the Tule Desert Hydrographic Basin in light of geographical, geological, and hydrological factors. *Id.* More data related to this Basin was available for BLM to consider, given the presence of more drilled wells in the area. BLM began by providing a general figure depicting a hydrogeologic cross-section. *Id.* at Figure 3-10. BLM found that most of the groundwater beneath Tule Desert is regional carbonate aquifer groundwater moving in a northerly to southerly direction. *Id.* at 3-32; *see also* FEIS Figures 3-8 and 3-10. BLM stated that groundwater in the regional aquifer likely enters the Tule Desert from the north through both volcanic rocks, on the eastern side of the Clover Mountains, and a deep section of Paleozoic carbonate rocks forming the regional deep carbonate aquifer system. *Id.* at 3-33.

BLM incorporated into its analysis a review of recent modeling data that helped simulate groundwater movements through the complex geologic areas of the regional fracture-rock aquifer system. *Id.* at 4-15. BLM was aware that uncertainty exists in attempting to predict future effects on large-scale geologically complex flow systems, but that such uncertainty will be reduced when more complete hydrological data is produced and monitoring programs are implemented. *Id.* at 4-16. BLM further indicated that obtaining more detailed data would be highly cost prohibitive and would take large amounts of time. BLM again emphasized that the ultimate amount of water available for LCWD to extract would be dependent on the NSE’s approval. *Id.* at 4-6.

In reviewing the available literature, BLM dealt with the inherent hydrogeologic complexity of the Project area that has resulted in a lack of unified agreement among water experts concerning the underground flow system. *Id.* In its Response, BLM emphasizes that “[c]ourts will find that an agency has taken the necessary hard look where the agency reviews what it considers the best available information and identifies where the information may be lacking.” BLM’s Response at 24 (citing *Methow Forest Watch v. U.S. Forest Service*, 383 F. Supp. 2d 1263, 1273 (D. Or. 2005)). Given the level of detail in BLM’s analysis of the flow patterns and recharge areas, we find that BLM met the following standard: “An agency takes an appropriate hard look in relation to cumulative impacts when it provides justification on why more definitive information could not be provided for what otherwise may be considered general statements about possible effects.” BLM’s Response at 24 (citing *Ocean Advocates v. U.S. Army Corps of Engineers*, 361 F.3d 1108, 1128 (9th Cir. 2004)).

Appellants offer one other criticism of BLM’s cumulative impacts analysis that bears mention. They state that the EPA echoed their concern that the Kane Springs and SNWA development projects were erroneously excluded from the cumulative impacts analysis based on inaccurate assumptions. SOR at 15 (citing EPA Comment 7-2). However, as BLM notes, “[t]his is wrong.” BLM’s Response at 25. BLM is correct that EPA did not mention either the SNWA or Kane Springs Project in Comment 7-2. FEIS App. F, pdf. at 27. Nor did EPA refer to inaccurate assumptions, but simply stated that there were uncertainties regarding the interconnection with other hydrographic basins. *Id.* at 28. BLM asserts that the sections of the FEIS devoted to water resources, and geohydrology related to those resources, provide the “best available snapshot of the relevant information related to hydrologic connections concerning directions of groundwater flow systems.” BLM’s Response at 25; *see* FEIS at 3-22 to 3-40, 4-2, 4-6 to 4-21; *id.*, Map 3-5. We agree with BLM that neither the Deacon Article nor the EPA comment provides support for Appellants’ argument that BLM’s cumulative impacts analysis related to the “alleged” hydrologic connections is deficient or inaccurate. BLM’s Response at 25-26; *see also Wyoming Outdoor Council*, 176 IBLA at 25.

As BLM states, “[t]he Department is entitled to rely upon the reasoned analysis of its own experts, and a disagreement between experts does not show BLM failed to follow through with its NEPA obligations.” BLM’s Response at 25 (citing *IMC Chemical Inc.*, 155 IBLA 173, 197 (2001); *Tucson Herpetological Society v. Salazar*, 566 F.3d 870, 881-82 (9th Cir. 2009)). We have considered the evidence offered by Appellants in terms of the rule that, with issues of a highly technical nature, when BLM relies on the opinions of its technical experts concerning matters within their expertise, and such opinions are reasonable and supported by the record, any challenge to such reliance must demonstrate, by a preponderance of the evidence, error in data, methodology, analysis, or conclusion of the experts. *See*

Wyoming Outdoor Council, 176 IBLA at 25; *Fred E. Payne*, 159 IBLA at 78. We agree with BLM's assertion that Appellants' evidence, primarily the Deacon Article, "does not specifically address BLM's FEIS analysis and does not show by a preponderance of evidence any error in BLM's assessment of the groundwater flow systems." BLM's Response at 25.

b. Climate Change and Cumulative Impacts

Appellants argue that "BLM was required to rigorously explore both how ongoing climate change has impacted the environmental baseline in the project area, and how those changes will combine with and exacerbate the impacts from the proposed project approval." SOR at 17. They claim that "BLM merely acknowledged that climate change is occurring, but declined to meaningfully analyze the combined impacts of climate change and the proposed project or the impacts of climate change on the baseline, claiming instead that uncertainty precluded it from doing so, or that it was beyond the scope of the EIS." *Id.*; see FEIS App. F. According to Appellants, "BLM's attempt to hide behind uncertainty is unfounded." SOR at 17. They state that they explained in their comments that

many impacts of global warming have been predicted with a high degree of certainty and precision, providing BLM with more than adequate information to analyze the combined impact of global warming and the Project's impacts on resources such as water availability, as well as impacts to imperiled plants and animals.

Id.

Appellants assert that "[g]lobal warming is having and will continue to have well-established impacts on . . . water availability." *Id.* They state that the decrease in streamflow and water availability is "human induced [and] 'portend . . . a coming crisis in water supply for the western United States.'" *Id.* (quoting Tim P. Barnett, *et al.*, *Human-Induced Changes in the Hydrology of the Western United States*, 319 SCIENCE 1080-83 (2008), and citing Tim P. Barnett and David W. Pierce, *When Will Lake Mead Go Dry?*, 44 WATER RESOURCES RESEARCH W03201 (2008)). Also citing the U.S. Global Change Research Program, which they assert "coordinates and integrates federal research on changes in the global environment and their implications for society, as required by the Global Change Research Act of 1990 (Pub. L. 101-606)," Appellants state that "the rate of rainfall has been declining over the last century in the Southwest." SOR at 18. They assert that decreasing water availability, exacerbated by the Project's proposed use of almost 14,480 AFY, should have been considered in the FEIS. *Id.*

In response to Appellants' global warming argument, BLM states that "an agency has 'taken the necessary hard look where the agency reviews what it considers the best available information and identifies where the information may be lacking.'" BLM's Response at 27 (citing *Methow Forest Watch v. U.S. Forest Service*, 383 F. Supp. 2d at 1273). BLM discounts as "unfounded" Appellants' general assertions that it failed to evaluate the precipitation in the project area and to evaluate the potential implications of global warming in relation to the project. BLM explains that Chapter 3 of the FEIS "provide[s] a clear summary of known precipitation data for the areas in and around the project area," that Table 3-3 places the data from the "period of record" into chart form, and that BLM evaluated the precipitation data by comparison to surface evaporation rates. BLM's Response at 28; see FEIS at 3-13 to 3-14.

BLM further responds that the FEIS provides a "rational discussion" of the potential global warming impacts that are generally accepted by "the most recognized scientific body researching the issue," the Intergovernmental Panel on Climate Change (IPCC). BLM's Response at 28; FEIS at 4-62 to 4-63. BLM asserts that it sought to "clearly articulate the limitation of . . . very long-term climatic projections." BLM's Response at 28. The FEIS stated:

The assessment of greenhouse gas emissions and climate change is in its formative phase, and the net impact to climate cannot yet be determined with an acceptable degree of certainty. Predicting regional changes in streamflow and groundwater recharge due to climate change remains challenging particularly because of uncertainty in regional projections of how precipitation changes.

FEIS at 4-63. BLM argues that Appellants' statements about "possible general precipitation or climatic trends for a geographic quarter of the United States hardly show 'both certainty and precision' that BLM somehow failed to appreciate in its own analysis." BLM's Response at 29. BLM states that "the degree of uncertainty in current modeling scenarios prevents a more detailed analysis as related to possible connections to this particular proposed project," and that it evaluated "impacts in context of what it considered to be the best available and widely accepted information and identified where the information is lacking." *Id.* (citing *Methow Forest Watch v. U.S. Forest Service*, 383 F. Supp. 2d at 1273).²⁰

²⁰ In commenting upon the DEIS, the EPA recommended inclusion of "a separate discussion of climate change and its potential effects on the proposed groundwater development project and associated development." AR 7.6.7. at pdf. 8. In response to BLM's inclusion in the FEIS of a discussion of possible effects of the LCLA Project and climate change, the EPA stated that it "appreciate[d] . . . the additional information in the FEIS on groundwater resource effects and climate change."

(continued...)

Our review of the record, including relevant sections of the FEIS, shows that despite the present reality that the assessment of greenhouse gas emissions and climate change is in its formative phase, BLM nonetheless proceeded to consider the LCLA Project in the context of what is known about the subject, on the basis that “there is consensus that global temperatures have been increasing.” FEIS at 4-62. BLM recognized that “the future of climate change on water resources will depend on trends in both climatic and non-climatic factors including increased demands for water caused by population growth . . . and changes . . . in water management policies.” FEIS at 4-64. BLM took the requisite hard look at the combined impacts of climate change and the LCLA Project, in light of recent publications from the IPCC and other scientific literature. BLM’s review was necessarily predicated upon a certain amount of scientific uncertainty. *See* Intervenor’s Answer at 36 (citing *North Slope Borough v. MMS*, 343 Fed. App. 272, 275 (9th Cir. 2009); *Conservation Northwest v. Rey*, 674 F. Supp. 2d 1232, 1253 (D. Wash. 2009)). We further conclude, as we did in *Bristlecone Alliance*, 173 IBLA at 81 (quoting BLM Answer therein), that “any incremental impact of emissions from the project in relation to global warming impacts on potential water availability, are simply too small to accurately quantify in relation to water resources.” *See also Powder River Basin Resource Council*, 180 IBLA 119, 136 (2010).

c. Impacts to Protected Plant and Animal Species

Appellants argue that BLM failed to adequately analyze the cumulative impacts of the Project, together with past, present and reasonably foreseeable future water development actions, to special status plant and animal species and their habitats, including the desert tortoise, southwestern flycatcher, several Virgin River species (Virgin River chub, woundfin, Yuma Clapper rail, and Yellow billed cuckoo), and special status plants. They assert that BLM failed to provide a meaningful analysis of (1) the cumulative impacts of the Project, in combination with other water development projects, on protected species and their habitats; (2) the direct, indirect, and cumulative impacts of the Project on the desert tortoise, which is listed as threatened under the Endangered Species Act; and (3) the cumulative impacts to species and habitats caused by desertification resulting from the Project. SOR at 27. For purposes of clarity, we will address (1) and (3) in tandem, since they involve many of the same considerations, and then review Appellants’ desert tortoise argument.

Appellants argue that the cumulative impacts to protected species and habitats resulting from the SNWA and Kane Springs Projects should have been evaluated in combination with the LCLA Project. Appellants note that “BLM included the

²⁰ (...continued)

AR 9.4.6. EPA Comment to FEIS, pdf. at 2 (May 29, 2009).

proposed project and these others on a map of ‘interrelated projects’ for the Kane Springs Valley Groundwater Pipeline that shows that they will have impacts on the same resources,” but that “BLM failed to fully consider the cumulative impacts of these projects in any of the environmental reviews.” *Id.* at 28. According to Appellants, although these other water projects “potentially extract groundwater from the same underground water source,” since “these water basins may be hydrologically interconnected.” *Id.* “If they are interconnected, pumping groundwater out from one basin may have impacts far from the site of pumping.” *Id.* (citing FEIS at App. F (Comment 8-3)). One impact identified by Appellants is to “reduce water available at springs, upon which protected species rely for survival.” *Id.* at 29 (citing FEIS at 3-54 to 3-55). Appellants state that when “too much water is pumped out of an aquifer, springs will be affected for part or all of the year,” and that “[s]prings and other surface water bodies are extremely vital to protected species and create areas with the highest species richness within the desert.” *Id.*

Appellants complain that “BLM acknowledged that it is possible that groundwater systems for these water projects may be interconnected and impacts to surface waters and springs could occur,” but failed to “provide a cumulative impact analysis of their converging effects claiming that it lacked the time to do so.” *Id.* (citing FEIS at App. F (Comment 8-3)). Appellants contend that BLM’s failure to conduct the required analysis cannot be excused, and that BLM is “still require[d] to explain why and summarize the information that is available now.” *Id.* Instead, Appellants assert, BLM “makes the unsupported conclusory assertion that groundwater pumping will have no impacts to surface water resources in the Tule Desert Hydrographic Area or in the Clover Valley Hydrographic Area.” *Id.* at 30 (citing FEIS at 4-10, 4-26 to 4-29). Appellants state that they submitted several credible scientific studies to BLM “showing there could be a reasonably significant adverse impact on surface waters due to groundwater pumping.”²¹ *Id.*; see FEIS at App. F (Comment 8-6). According to Appellants, these studies show, *inter alia*, that the “combination of large demand for usable water and the semi-arid climate in the Southwestern United States has led to groundwater overdrafts,” with resulting “declines in surface-water levels and streamflows, reduction or elimination of vegetation, and land subsidence.” SOR at 30. Appellants conclude that “at minimum, BLM was required to incorporate this highly-relevant data, a summary of the existing data showing how groundwater pumping can have these impacts, and evaluate these impacts based upon theoretical approaches or research methods generally accepted in the scientific community.” *Id.* at 30-31.

²¹ Appellants cite to Igor S. Zekster, *et al.*, *Environmental Impacts of Groundwater Overdraft: Selected Case Studies in the Southwestern United States*, 47 ENVTL. GEOLOGY 396 (2005); Marith C. Reheis, Owens (Dry) Lake, California: a Human Induced Dust Problem (July 2008), accessed at <http://geochange.er.usgs.gov/sw/impacts/geology/owens> (last visited Jan. 9, 2012).

Appellants argue that they “provided BLM with extensive information showing that groundwater pumping leads to desertification,” and that the studies cited show that “desertification can lead to dire consequences for species and habitat as well as for other resources including soils and air quality, but that BLM failed to adequately address these impacts.” *Id.*²² Appellants again assert that BLM “appears to assume that this issue will be addressed through a mitigation plan developed for the pumping projects,” an approach that they claim “fails to fulfill BLM’s *duty* to provide analysis and response pursuant to NEPA.” *Id.* at 34-35 (citing 42 U.S.C. § 4332(2)(C)(i) (2006); 40 C.F.R. §§ 1508.7 and 1508.25). Moreover, according to Appellants, “desertification as with other impacts cannot be mitigated on any meaningful timescale.” SOR at 35 (citing Jayne Belnap, *Surface Disturbances: Their Role in Accelerating Desertification*, 37 ENVTL. MONITORING AND ASSESSMENT 39 (1995)). Appellants conclude that BLM’s claim that desertification can be mitigated is “inaccurate and misleading to the extent that it assumes without adequate analysis that protected species and other resources will not be significantly impacted from desertification associated with the Project and that if such impact[s] occurred they could be timely mitigated after the fact.” SOR at 35.

In responding to Appellants’ protected species arguments, BLM observes that they comprise “another version of Appellant[s]’ previously deficient cumulative impacts claim, in which Appellant[s] allege [that] BLM did not properly include the Kane Springs and SNWA groundwater development projects within the evaluation of groundwater impacts associated with the current LCWD propose[d] project.” BLM’s Response at 34. With regard to the map relied upon by Appellants that identifies the location of water projects in relation to the Kane Springs Project pipeline, *see* SOR at 28, Attachment A, BLM states that the map does not depict “impacts” and does not represent BLM’s conclusion that the projects identified on the map will have impacts on the same resources. Instead, BLM states that the map shows that the Kane Springs and SNWA Projects occur in separate and distinct hydrographic basins. BLM’s Response at 35; *see* FEIS at 4-70 and Map 4-1 (depicting the separate hydrographic basins); *see also* Map 3-5.

BLM disputes Appellants’ assertion that, based upon NSE Ruling No. 5181, BLM was aware that the hydrologic basins with the other water projects may be hydrologically interconnected. BLM’s Response at 35; *see* SOR at 28; FEIS App. A. BLM emphasizes, however, that the ruling predates most of the new analysis

²² The studies cited by Appellants include Igor S. Zekster, *et al.*, *supra* note 21; Marith C. Reheis, *supra* note 21; Andrew J. Elmore, *et al.*, *Decline in Alkali Meadow Vegetation Cover in California: the Effects of Groundwater Extraction and Drought*, 43 *Journal of Applied Ecology* 770 (August 2006); Andrew J. Elmore, *et al.*, *Groundwater Influences on Atmospheric Dust Generation in Deserts*, 72 *Journal of Arid Environments* 1753 (October 2008).

reviewed in the FEIS concerning geology, hydrogeology, and groundwater flow patterns as they pertain to potential basin interconnections. See FEIS at 3-22 to 3-42, 4-11 to 4-21, 4-69 to 4-70. Thus, observes BLM, “it is Appellant who has not specifically shown that the volume of information BLM has provided is deficient in describing the hydrogeological features of the relative area to the extent provided in the best available data.” BLM’s Response at 35 (footnote omitted). Further, BLM argues that the pages of the NSE ruling cited by Appellants do not prove the “significant logical leap” they assert, and do not include “any formal position relative to the alleged interconnection between the Clover Valley and Tule Desert hydrographic basins and the actual groundwater basins related to the Kane Valley and SNWA groundwater developments.” *Id.* at 35-36; see SOR at 28 (citing NSE Ruling No. 5181 at 16-18, 22, FEIS App. A).

BLM further disputes Appellants’ argument that BLM acknowledged potential interconnections between groundwater resources and surface waters and springs, but failed to provide the required cumulative impacts analysis based upon a “lack of time” rationale. BLM’s Response at 36; see SOR at 29-30. We see no basis for Appellants’ claim that BLM admitted to not considering the cumulative impacts of the Project on protected species and their habitat because BLM lacked the time to study the issue. In its response to Comment 8-3, BLM acknowledged “disagreement among scientists and policymakers on the details of the regional groundwater system,” and stated that each system “represents a discreet hydrological basin for which the allocation of water rights is within the purview of the Nevada State Engineer.” FEIS App. F, Response to Comment 8-3. In considering the various scientific views and available data with regard to the cumulative impacts of groundwater pumping, BLM found that “uncertainties exist and assumptions for analysis were required to analyze the impacts of granting the right of way.” *Id.*; see *Wyoming Audubon*, 151 IBLA at 51. The FEIS concluded that there were prohibitive resource costs, in terms of time and money, involved in attempting to arrive at definitive conclusions, for purposes of the subject FEIS, regarding the possible interconnectivity among hydrographic basins, an issue debated since 1915. FEIS App. F, Response to Comment 8-3; FEIS at 4-2, 4-16. Nonetheless, BLM includes in the FEIS a review of the possible interconnection of the hydrographic basins that may be affected by the LCLA Project, in light of recent scientific studies, and determines that the impacts of any interrelation on threatened species and their habitat were not substantial. See FEIS at 3-15, 3-23, 3-33, 3-35, 3-36, and 4-14; Intervenor’s Answer at 46-47.

Our review confirms BLM’s observation that the citations to the FEIS cited by Appellants’ contain information that generally contradicts their arguments with regard to impacts to protected species and their habitat. For example, as BLM explained in Section 4.3.1.2.3 of the FEIS, “[a]ll surface water features (including local springs) in the Tule Desert are ephemeral and do not appear to be recharged by regional groundwater,” and “water for the project would be pumped from the

deep carbonate aquifer which, based on the isotope data discussed in Section 3.3, does not have a significant direct or indirect connection to surface water resources.” FEIS at 4-10. The FEIS explains that there are no anticipated impacts associated with the proposed project on springs or other surface waters in and around the Tule Desert, and further refers to Section 3.3 of the FEIS for a more complete outline of the relevant scientific information. The FEIS further states that “pumping in the Clover Valley is not anticipated to impact surface water flows or springs . . . that contribute to surface flows in Clover Creek and the Meadow Valley Wash.” FEIS at 4-27 to 4-28. Thus, we agree with BLM that its “assessment . . . provides the basic finding by BLM of the lack of impacts to surface waters related to Clover Creek and Meadow Valley Wash, and further directs the reader back to previous water resources section[s] for a fuller description of the information supporting the assessment.” BLM’s Response at 37. Indeed, the FEIS provides additional discussion of the lack of connectivity between groundwater pumping in the basins at issue with surface waters, local springs, and regional springs. See FEIS at 4-8 to 4-18.

With regard to the two scientific studies, cited in note 21 *supra*, that Appellants claim that BLM should have addressed in the FEIS, BLM states that “one related to the southwest in general and the other related to a particular issue in California.” BLM’s Response at 38; see SOR at 30 nn.21 & 22, 34. BLM states that “[n]either article explains how BLM’s current FEIS analysis is faulty, and BLM ‘need not respond to every single scientific study or comment’ provided by Appellants during the comment period.” BLM’s Response at 38 (quoting *Conservation Northwest v. Rey*, 674 F. Supp. 2d at 1253). We agree with BLM that Appellants have not provided evidence that shows by a preponderance any flawed analysis on behalf of BLM and its experts “related to the geohydrology of the applicable groundwater flow patterns and related washes, [or] that the applicable deep carbonate aquifers are also not likely interconnected with relevant surface waters.” BLM’s Response at 38-39; see *Wyoming Outdoor Council*, 176 IBLA at 25; *Biodiversity Conservation Alliance*, 174 IBLA at 13-14; *Salinas Ramblers Motorcycle Club*, 171 IBLA 396, 400 (2007). A mere difference of opinion, even of expert opinion, will not suffice to show that BLM failed to fully comprehend the nature or scope of the significant impacts. *Fred E. Payne*, 159 IBLA at 78.

We agree with BLM’s conclusion that it has taken a “hard look [at] water resource impacts related to ground water resources and surface waters, based [upon] best available data,” and that the “FEIS provided a ‘reasonably thorough discussion of the significant aspects of the probable environmental consequences.’” BLM’s Response at 39 (quoting *California v. Block*, 690 F.2d at 761). BLM has “explained impacts in context of what it considered to be the best available and widely accepted

information and identified where the information is lacking.” BLM’s Response at 39 (citing *Methow Forest Watch v. U.S. Forest Service*, 383 F. Supp. 2d at 1273).²³

d. Impacts to Desert Tortoise

The arguments made by Appellants regarding impacts of the LCLA Project on the desert tortoise are similar to those made regarding impacts to protected species and their habitats generally. Appellants argue that “BLM failed to fully identify and analyze the Project’s impacts to the desert tortoise.” SOR at 32. In Appellants’ view, BLM “simply stated that it would adopt a ‘mitigation plan’ should the tortoise be negatively affected by the project.” SOR at 32; *see* FEIS App. F (Comment 8-4). Appellants state that “a mitigation plan cannot replace the mandate to conduct an impact analysis under NEPA.” SOR at 32 (40 C.F.R. §§ 1508.7 and 1508.25; *Kern v. BLM*, 284 F.3d at 1062)).

Appellants further contend that “BLM underestimated the amount of habitat loss that is reasonably expected to occur.” SOR at 32. Citing to the FEIS, Table C-3, Appellants note BLM’s prediction that 89 to 108 acres of tortoise habitat will be permanently lost and 697 to 848 acres will be temporarily disturbed, but caution that BLM’s “estimates depend on an assumption that all planned restoration will be achieved and fully mitigate impacts.” *Id.* Appellants state that “the relevant evidence shows that restored habitat does not achieve the same . . . habitat values as intact native habitat in the time horizon contemplated by BLM,” and that “BLM’s assumption that habitat recovery would be certain and complete is overstated and potentially misleading.” *Id.* Appellants cite to “numerous well-known studies [that] show that ‘temporarily disturbed’ habitat has many of the impacts of permanently disturbed habitat.”²⁴ *Id.* Appellants claim that BLM did not address any of the cited studies or Appellants’ comment challenging BLM’s assumptions regarding habitat recovery. They claim that BLM improperly “assumed that its mitigation measures are

²³ In this connection, we note that, contrary to Appellants’ assertion, BLM analyzed the impacts of the Project on the southwestern willow flycatcher (FEIS at 3-57 to 3-58, 4-30); the Yuma Clapper Rail (FEIS at 3-58, 4-30); the Yellow Billed cuckoo (FEIS at 3-58 to 3-59); and the Virgin River Chub and woundfin (FEIS at 3-59 to 3-60, 4-31). V

²⁴ To support its argument that BLM overstates its assumptions regarding habitat recovery, Appellants rely upon the following three articles from ENVIRONMENTAL EFFECTS OF OFF-ROAD VEHICLE USE (Robert H. Webb and Howard G. Wilshire, eds. 1983): Earl W. Lathrop & Peter G. Rowlands, *Plant Ecology in Deserts: An Overview*; Burgess L. Kay & Walter L. Graves, *History of Revegetation Studies in the California Deserts*; and Robert H. Webb, Howard G. Wilshire & Mary Ann Henry, *Natural Recovery of Soils and Vegetation Following Human Disturbance*.

adequate enough to address any adverse impacts to the desert tortoise, despite the existence of scientific, peer-reviewed studies to the contrary submitted to the agency by Appellants.” *Id.* at 33; *see* FEIS 4.0, App. F, (Comment 8-1 and Response to Comment 8-1).

BLM provides a thorough response to Appellants’ arguments that BLM’s desert tortoise impacts analysis is deficient or faulty. In particular, BLM counters Appellants’ reliance upon BLM’s Response to Comment 8-4, in which BLM indicated that once the U.S. Fish and Wildlife Service (USFWS) issues its biological opinion (BO) for the LCLA Project, BLM may need to impose additional terms and conditions or mitigation measures. *See* FEIS App. F. In BLM’s view, Appellants “attempt[] to twist this very reasonable statement into some form of admission by BLM that the only analysis of project impacts on tortoise would be these additional mitigation measures.” BLM’s Response at 40; *see* SOR at 32. BLM asserts that “noticeably absent” from Appellants’ argument are references to the sections of BLM’s FEIS analyzing the direct and indirect impacts (FEIS at 4-28 to 4-29), and the sections analyzing cumulative impacts (FEIS at 4-72 to 4-73), on the desert tortoise and their habitat. BLM’s Response at 40.²⁵ Based upon our review of the record, we agree with BLM.

In order to assess the potential impacts of the LCLA Project on the desert tortoise, BLM obtained a BO from the USFWS. *See* AR 4.3.2.2 (BO). BLM prepared a baseline analysis setting forth the tortoise’s typical habitat and activity patterns. FEIS at 3-56 to 3-57. This baseline analysis included a survey that used the strip-transect method to sample distribution and relative abundance of signs of tortoise life throughout the Project area. FEIS at 3-57. BLM acknowledged that “[c]onstruction and operation of the Proposed action will impact desert tortoise and desert tortoise habitat,” and that construction of the Project will possibly “result in the take of between 0 and 18 tortoises.” *Id.* at 4-28. Further, construction and operation of the Project will permanently disturb 108 acres of desert tortoise habitat, and temporarily disturb 848.5 acres of desert tortoise habitat, 253.7 acres of which is designated as critical habitat. The FEIS provides an analysis of other potential effects of the Project to the desert tortoise and its habitat, as well as habitat restoration and other possible mitigation measures on the temporarily disturbed lands. *Id.* at 4-29 to 4-30. The

²⁵ The BO issued by USFWS found the proposed action “not likely to jeopardize the continued existence of the threatened desert tortoise,” and “is not likely to adversely modify designated critical habitat or diminish the capability of the area in providing the primary constituent elements of critical habitat.” BLM ROD, Attachment 1 at 12. The BO also set forth several “reasonable and prudent measures with terms and conditions” during construction and operation of the Project, including payment of an estimated \$1.4 million in remuneration fees associated with desert tortoise. BO at 14-27.

FEIS includes a separate cumulative impacts analysis with respect to the desert tortoise. *Id.* at 4-73.

We take particular note of Appellants' assertion that BLM has misrepresented the amount of desert tortoise habitat loss. *See* SOR at 32. Appellants' challenge to BLM's habitat loss estimates appears based upon their belief that restoration of habitat "does not achieve the same [] habitat values as intact native habitat in the time horizon contemplated by BLM." *Id.* However, as BLM asserts, "[n]owhere in BLM's FEIS . . . has BLM attempted to describe the required habitat rehabilitation in terms of absolute certainty nor established a time horizon." BLM's Response at 41. BLM argues that Appellants' "attempt to cause some sort of discrepancy about what is considered permanent versus temporary impacts does not prove any sort of deficient analysis in the FEIS, and is not directly relevant to what is required as mitigation for this project." *Id.* BLM states that its mitigation measures are aimed at reducing potential effects, "regardless of temporary versus permanent disturbance." *Id.*; *see* FEIS at 4-29.

In light of the analysis regarding impacts to the desert tortoise and their habitat, as set forth in the BLM's FEIS and in USFWS' BO, we see no basis for Appellants' argument that BLM "failed to fully identify and analyze the Project's impacts to the desert tortoise," and that BLM "simply stated that it would adopt a 'mitigation plan' should the tortoise be negatively affected by the project." SOR at 32. The FEIS provides a clear analysis of the impacts of the Project on affected plants and animals generally, and the desert tortoise specifically. FEIS at 4-26 to 4-36. We conclude, as BLM argues, that "Appellant[s] have] simply failed to explain how BLM's analysis and related mitigation for the total disturbance of 0.34 percent of the applicable critical habitat unit did not result in the necessary hard look at this issue." BLM's Response at 41. To the contrary, we find that BLM took the required "hard look" at the impacts, *id.*, analyzed the appropriate geographic and temporal scope of impacts on animal and plant species, FEIS at 3-42 to 3-64, and, after a reasonably thorough discussion of the probable environmental consequences of construction and operation of the Project, issued the ROD.

E. BLM's Mitigation Plan is Adequate

[8] Appellants argue that BLM's failure to fully analyze direct, indirect, and cumulative impacts to species and habitats means that "no mitigation plan can be meaningfully developed nor can its effectiveness be accurately assessed." SOR at 36. Appellants contend that "the mitigations referred to by BLM in the FEIS and the response to comments lack detail." *Id.* Appellants complain that "even many of the standard construction and operation procedures provided in Appendix C are devoid of a 'trigger mechanism' from which mitigation measures should start to be implemented," and that there is "no indication as to whether BLM will

require the project proponent to provide adequate resources to BLM to accomplish the measures.” *Id.* Appellants claim that BLM mistakenly assumes that temporarily disturbed habitat can be fully restored through a mitigation plan, when “numerous scientific studies indicate that habitat restoration is unlikely to restore habitat to its original condition in a meaningful timeframe, if at all, nor can many other resources be restored after they are lost including soil structure and native vegetation.” *Id.* According to Appellants, “BLM merely listed the mitigation measures,” *see* FEIS App. C, without providing “adequate discussion or analysis.” BLM’s Response at 36-37.

We agree with BLM’s general response that Appellants’ mitigation measures “section is premised on the conclusion that Appellant has actually proven BLM ‘failed to fully analyze direct, indirect, and cumulative impacts to species and habitats and other resources,’” when “Appellant has far from proven any failure to comply with NEPA’s hard look requirement related to direct, indirect, and cumulative impact analysis.” *Id.* at 42 (quoting SOR at 36). We further agree with BLM that “Appellant’s alleged deficiencies with the mitigation measures listed in Appendix C following the FEIS are simply abstract statements.” *Id.* With regard to the absence of any “‘trigger mechanism’ from which mitigation measures should start to be implemented,” SOR at 36, BLM correctly notes that Appellants “do[] not actually specify which procedures require a trigger, what that trigger should be, why a trigger is necessary, with what issue related to the procedure in question is Appellant in disagreement, etc.” BLM’s Response at 42. Similarly, as BLM states, Appellants fault BLM for failing to provide adequate resources to accomplish the mitigation measures but do not identify what resources or measures are at issue.²⁶ *Id.* In *Colorado Mountain Club*, 161 IBLA 371, 383 (2004), the Board stated that “[a]ppellants’ generic claims that mitigation is bound to fail do not assert, let alone demonstrate, that these results cannot be achieved.” Likewise, we reject Appellants’ attempt to undermine BLM’s analysis regarding revegetation and other mitigation measures by stating merely that such mitigation is not possible.

Moreover, as BLM states, the FEIS includes BLM’s analysis of Appendix C mitigation measures where appropriate. *See, e.g.,* FEIS at 4-7 to 4-8, 4-22, 4-24, 4-27 to 4-29, 4-32 to 4-34, 4-36, 4-41, 4-43, 4-53. BLM asserts that Appellants “fail[] to appreciate where the mitigation measures contained in Appendix C mostly originated—the project proponent.” BLM’s Response at 43. BLM states that “[a]s

²⁶ We note that the Clover Valley Monitoring and Management Plan provides that “[t]he mitigation portion of the plan shall include a bond or escrow account established by the District to fund any possible mitigation actions. FEIS App. B at 6. Further, the BO provides that BLM shall ensure payment of remuneration fees to compensate for the loss of desert tortoise habitat—estimated to be \$1,437,010.90—by requiring payment prior to issuing the Notice to Proceed. BO at 17-18.

voluntarily proposed mitigation measures, BLM will consider them as part of any Plan of Development and require compliance therewith.” *Id.* at n.9; *see* ROD at § II D. BLM alleges that in asserting that “BLM assumes that temporarily disturbed habitat can be fully restored through a mitigation plan,” SOR at 36, Appellants mischaracterize the nature of the mitigation measures listed in Appendix C and analyzed where appropriate in the FEIS, as noted *supra*. BLM correctly states that Appellants do “not identify the ‘plan’ to which [they are] referring within the measures of Appendix C, where BLM made that ‘assumption,’ and what part of the FEIS analysis is fundamentally dependent on that ‘assumption.’” BLM’s Response at 43. We agree with BLM that Appellants’ “generalized allegations about the mitigation measures in Appendix C,” or opinions attributed “to the BLM which may be wholly inaccurate,” fail to “prove a deficient analysis within the FEIS itself.” *Id.* at 43-44.

In *Powder River Basin Resource Council*, 180 IBLA at 137 (quoting *Bristlecone Alliance*, 179 IBLA at 60), the Board emphasized that NEPA, being a procedural statute, “does not require agencies to avoid major Federal actions that may cause a significant impact on the human environment; it obligates agencies to undertake an EIS for such major Federal actions to ensure that the decisionmakers’ ‘selection of an action represents a fully informed decision.’” *See also Wyoming Outdoor Council*, 176 IBLA at 25; *In re Bryant Eagle Timber Sale*, 133 IBLA 25, 29 (1995). Moreover, “NEPA does not *require* the agency to mitigate impacts identified as significant in the EIS.” *Wyoming Outdoor Council*, 180 IBLA at 137 (emphasis added). The Board has rejected the argument that BLM’s NEPA analysis is deficient on the basis that it does not ensure implementation of certain mitigation measures. *Id.* BLM operates under the obligation to discuss the relevant mitigation measures “in sufficient detail ‘to ensure environmental consequences have been fairly evaluated.’” BLM’s Response to Order at 44 (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 352). BLM fully met that requirement.

IV. CONCLUSION

We conclude that the disputed FEIS, which is very comprehensive by NEPA standards, constitutes a “detailed statement” that takes a “hard look” at the potentially significant environmental consequences of the LCLA Project, including reasonable alternatives thereto, considering all relevant matters of environmental concern. The FEIS contains a “reasonably thorough discussion of the significant aspects of the probable environmental consequences” of the proposed action and reasonable alternatives. Appellants have not carried their burden to show, by a preponderance of the evidence, with objective proof, that BLM failed to adequately consider a substantial question of material significance to the proposed action, or otherwise failed to abide by section 102(2)(C) of NEPA. In analyzing the probable environmental consequences of the LCLA Project, BLM confronted many issues of a

highly technical nature, and in doing so was entitled to rely upon the opinions of its technical experts concerning matters within their expertise. In challenging those opinions, which we find are reasonable and supported by the record, Appellants have failed to demonstrate, by a preponderance of the evidence, error in data, methodology, analysis, or conclusions of the experts. BLM has studied and cataloged the probable and potential environmental impacts of the Project and how best to mitigate those impacts. NEPA's objective of ensuring that BLM and the public are adequately informed during the agency's decisionmaking process has been amply met in this case.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed.

James F. Roberts
Administrative Judge

I concur:

Christina S. Kalavritinos
Administrative Judge